

# Annual Report 2021-2022



**CENTRAL PULP & PAPER RESEARCH INSTITUTE**



# Annual Report

2021-2022



**CENTRAL PULP & PAPER RESEARCH INSTITUTE**

An Autonomous Organization Registered under Societies Act, and Under the Administrative Control of Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India



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## From the Directors Desk

History will judge the human kind in its own way when it evaluates our response to the challenges posed by the Pandemic to us as a human race. The response to this new disease was sluggish to start with but later, science in its most modern form to date rose to the occasion with the synthesis of Vaccines in almost real time.

Whereas the worst seems to be behind us, the pandemic itself has thrown up major challenges and disruption in supply chains and demand cycle. India, which is now dependent on imported waste paper, bore the brunt of supply chain disruptions causing huge demand – supply gap of recovered paper. At one point of time, the industry was prepared to give anything for a ton of waste paper. Thankfully, there were lessons learnt between the first and the second wave of the pandemic and the sector was able to keep afloat.

However, there was a paradigm shift in the thinking process of the sector, when the stakeholders started thinking in terms of studying the domestic supply chains of recovered paper both as a backward and forward linkage. CPPRI, well aware of this challenge beforehand had submitted a project for funding under the Project Based Support Scheme for setting up of Waste Paper Promotion Centers with an ultimate aim to bring more recycled fiber back in to the paper making system so as to increase the sectoral recovery rate by at least 10% from its present value of 50.

I am happy to report that we have received the first portion of the above grant in November – December 2021 and very soon, our stakeholders will see two dedicated centers coming up in Delhi and Chennai for promotion of collection and use of waste paper.

Also, under the same grant head, CPPRI has been given an allocation for setting up of biorefinery laboratory as well as a chemical recovery laboratory to provide state of the art process control to the Indian paper sector.

In the raw material side, we have got a substantive allocation for setting up of a Center of Excellence for Multiplication of Quality Planting Stocks of Selected Tree Species for pulpwood plantations. This project is being executed under the expert guidance of ICFRE, Dehradun. Very soon, plantations and related infrastructure for the Centre shall be in place at Saharanpur as well as Dehradun.



Further as a novel approach, the institute has received funds to execute activities related to Biopulping of lignocellulosic material with an aim of resource and input conservation in the paper making process.

During the year, many new facilities were created at the institute for the best interest of the stakeholders.

At the outset, it give me great pleasure in putting on record that the Environmental Management Division was successful in getting NABL accreditation for various ambient air pollution parameters. With this, the major revenue earning labs are under NABL certification. Efforts are also on to add more parameters under paper testing as well as food grade paper testing lab.

One of the most salient feature that has been added is the Pilot Scale facility of Bleaching of Pulps using Ozone. The details of the plant is given later in the report. The facility is now ready for use of the stakeholders.

CPPRI was provided with the mandate of monitoring of Grossly Polluting Industries (GPI) third time in a row in even years. The institute performed the role of the Nodal Center for Pulp & Paper Sector under this exercise.

CPPRI has put in place all the necessary planning in process addressing to the current requirements and future demands of the Indian Paper Sector. This progress and the path forward may not have been possible but for the support of our stakeholders. To this end, the fraternity of CPPRI extends its heartfelt thanks to the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Govt. Of India for providing all the required hand holding for execution of various functionalities and provision of grants.

The Paper Industry of the country is our chief stakeholder. We thankfully acknowledge the support received from the industry through its various Associations.

The Staff of CPPRI joins me in reiterating our endeavor to work towards an Atma Nirbhar Paper Sector in the Amrit Kaal of our independence.

Dr. M.K. Gupta,

Director





## THE PAPER SECTOR IN THE YEAR 2021-22

Emerging stronger after the tumultuous COVID affected period, the sector is fast emerging as a market leader in Asia with its dynamic product portfolio management and innovative production strategies. With an operating installed capacity of about 25 million tons, the industry has almost achieved pre-covid levels of production.

Our per capita paper consumption has increased to around 15-16 kg, largely propelled by increase in demand of packaging papers. However, looking at the average per capita consumption of 52 Kgs at the international level, we have a head room of increasing the consumption to at least about three times the present rate. This does require enabling policies to tide over the lack of fibrous resources faced by the sector. This gap is unique to India as other competing nations have dedicated wood-based resources for pulp wood plantations.

In term of production, as per one data source, India is placed at No. 5 in the global paper producing nations. Global average growth of production of paper, paperboard and newsprint is around 1%, whereas in India average growth of this industry is about 3-4 %. Thus, India offers one of the very few markets in the world that exhibits growth potential for paper and paper board.

International markets for paper are almost nearing saturation and any unexpected acceleration in demand is not foreseen. On the other hand, Indian paper market is a growing market, especially for packaging & tissue grade paper. The market is all set to increase even further with the move in the Indian economy to become Single Use Plastic Free.

The sector has worked hard on resource conservation in the last decade in order to remain relevant and competitive in the face of a globalised market. Commendable work has been done by the sector to reduce its energy and fresh water requirements. In term of water consumption, wood-based paper industry has come down from using 200 KL of water to about 30 KL at an average per ton of paper for virgin fibre-based mills. Some Recycled Fibre Based units have also reported the use of sub 3 KL water per ton of paper.

Indian paper industry is now exhibiting a clear inclination towards better quality of paper making the sector increasingly export oriented. In this direction, many of the units are adding export-oriented production to their portfolio. In the future, the gap between import and export is sure to tilt the balance of trade in India's favour. All it needs is the required policy and fiscal support from time to time.

A major gap that needs urgent attention lies in the newsprint sector. As on date, over 50% of the demand of Newsprint is being met from imports. There are melliferous reasons ascribed to this situation by manufacturers and users. More recently, the user sector has linked the

cause of imports to quality – a submission that has been denied by the manufacturers, who put the situation to cheap import of newsprint in the country. A concerted effort is needed to carry out a “root cause analysis” of the problem and put the desired policy in place so that import dependence on newsprint can be decreased.

#### Recent Trends Registered by Indian Paper Industry<sup>1</sup>

Year	Production Capacity	Production	Import	Export	Consumption
2016-17	20.65	16.91	4.310	1.040	20.220
2017-18	22.11	18.91	3.579	1.323	21.166
2018-19	21.90	19.36	3.250	1.910	20.700
2019-20	22.00	20.11	3.542	2.097	21.56
2020-21	24.32	21.68	2.098	2.585	21.19
2021-22	25.28	22.43	2.178	3.53	21.07

*Figures in Million Tons*

The given table is self-explanatory in nature and production of paper, paperboard and newsprint crossed 22.43 million tons in year the 2021-22. What is of interest is the steady increase in exports from the sector over the last few years.

<sup>1</sup>Data collected and compiled under Census Survey of Indian Paper Industry

## Snapshot of Indian Paper Industry (2021-22)<sup>2</sup>

The table below summarises the entire picture of the Indian paper sector for the period under reporting.

	<i>No. of Mills</i>	<b>912</b>	
<i>Total Installed Capacity, million tons</i>		<b>29.11</b>	
<i>Operating Installed Capacity, million tons</i>		<b>25.28</b>	
<i>Production of Paper, Paperboard, and Newsprint, million tons</i>		<b>22.43</b>	
<i>Capacity Utilization, %</i>		<b>-89</b>	
<i>No. of Running units</i>		<b>538</b>	
<i>No. of Mills Closed</i>		<b>368**</b>	
<i>Idle installed capacity, million tons</i>		<b>5.51</b>	
<i>Import (in Million tons)</i>		<b>2.17</b>	
<i>Export (in million tons)</i>		<b>3.53</b>	
<i>Consumption (in million tons)</i>		<b>21.07</b>	
<i>Per capita Consumption (kgs)</i>		<b>15.75</b>	
<i>Global Share</i>		<b>5.60%</b>	
<i>Contribution from Different Segments (million tons)</i>			
	<b>Wood-Based</b>	<b>Agro-Based</b>	<b>RCF Mills</b>
<i>Segment wise Production (in million tons)</i>	<b>4.32</b>	<b>1.31</b>	<b>16.80</b>
<i>Number of Paper Units (according to segment)</i>	<b>18 Units</b>	<b>21 Units</b>	<b>499 Units</b>

<sup>2</sup> Concluding findings of Census Survey of Indian Paper Industry

## PAPER SECTOR -THE IMPEX SCENARIO<sup>3</sup>

*Million Tons*

	<b>IMPORT</b>	<b>EXPORT</b>	<b>IMPORT</b>	<b>EXPORT</b>
YEAR	Chapter 47	Chapter 47	Chapter 48	Chapter 48
2017-18	5.51	0.002062	3.57	1.32
2018-19	7.95	0.007174	3.25	1.91
2019-20	8.50	0.026545	3.54	2.09
2020-21	7.70	0.032459	2.09	2.58
2021-22	8.54	0.004904	2.17	3.53

Trends in import of raw materials (ITC-HS Code 47) reflects the fibre deficiency effect, by exhibiting a steadily increasing trends. Also, this increase in imports can be attributed to poor recovery of consumed paper/post consumed paper. Further, due to global tremor in the year of 2019-20 & 2020-21, notable jump had seen in the export of processed raw material (pulp) but as market turned normal export under chapter 47 once again retook its original position.

In the finished product (under Chapter 48), since 2017-18 continuous down trend is registered in imports, whereas, our exports are continuously increasing. This reverse trend can be attributed to quality of India's manufactured product which has become competitive as per global market.

### Import & Export Scenario of Major Grades of Paper, Paper & Newsprint (Qty in Tons)<sup>4</sup>

The import /export scenario of main varieties of paper are placed in the following graphs.

Imports exhibit a marked downtrend. Newsprint, which has traditionally been the most imported item has exhibited a severe downtrend. Imports have not exhibited any rebound in the post covid period. Various factors that contribute to this downtrend are lowering in demand, supply chain disruptions and the ongoing Russia – Ukraine War.

The downtrend in the imports of other varieties of paper can also be seen. This trend is however, seen even before the on set of COVID. In part, this downtrend can also be ascribed to the hardening of pulp prices and consequently the paper prices internationally.

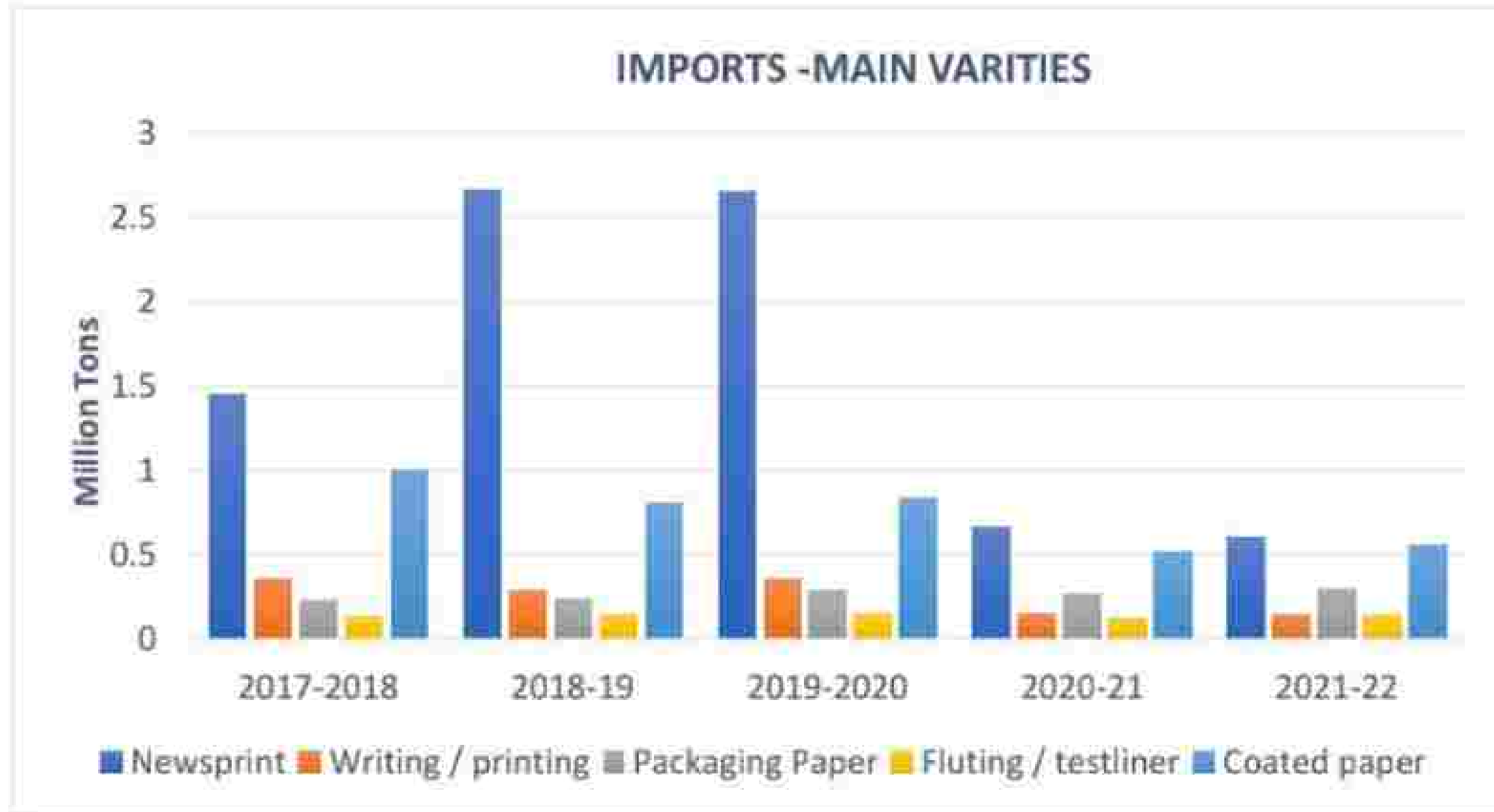
On the Export side, things seem to be looking up for all the major varieties of paper except newsprint. Over the last two years, the exports have increased almost to match the imports.

<sup>3</sup> Source: Ministry of Commerce & Industry

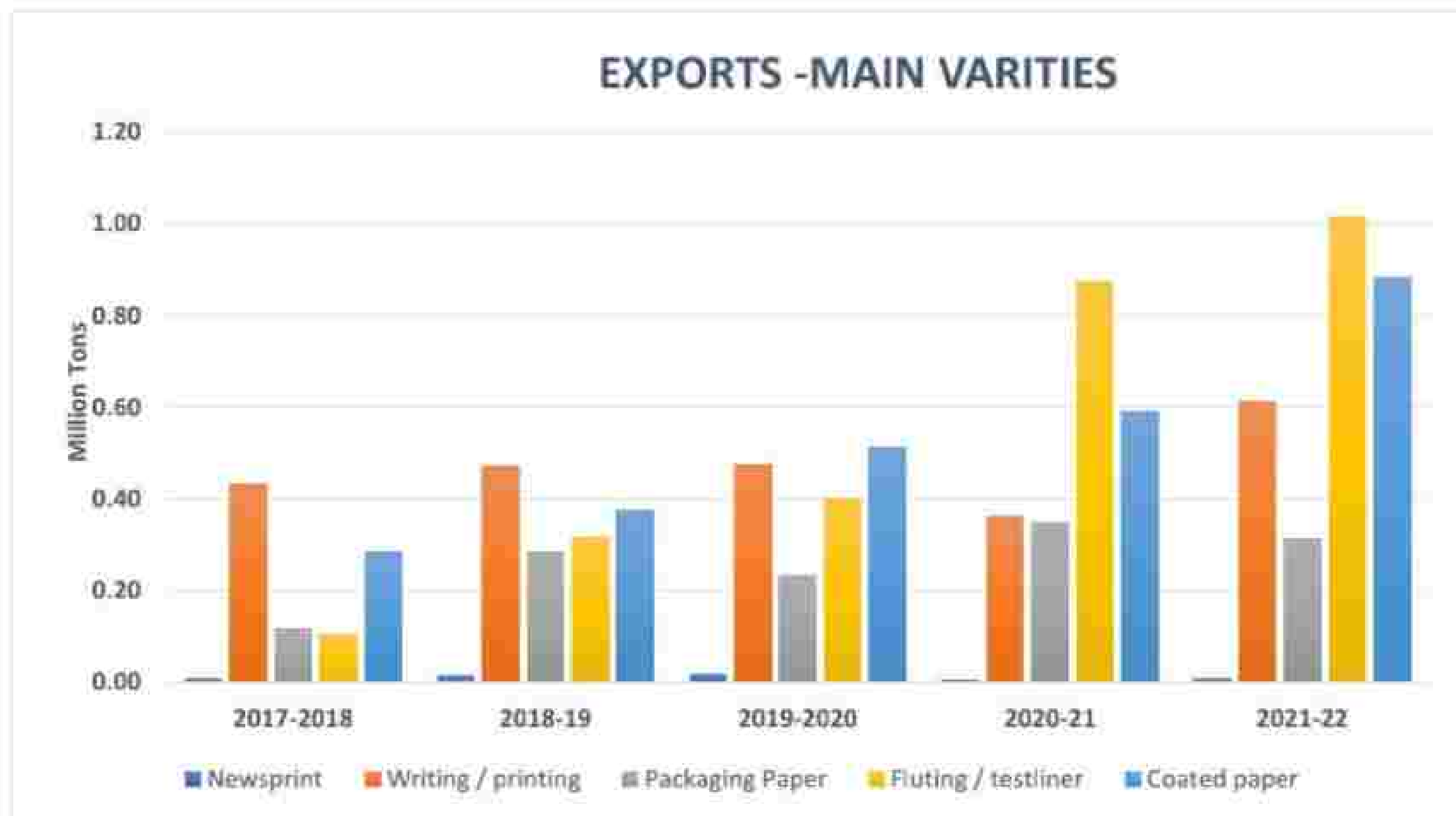
<sup>4</sup> Source: Ministry of Commerce, Govt. of India

Experts put the reason for this phenomenon to increasing product quality, lowering of domestic demand increased focus of the sector to export its produce.

*Figure 1: Import Export Scenario of Main Varieties*



*Figure 2: Export Scenario of Major Exported Varieties*



### Segmental review of Indian Paper Industry<sup>5</sup>

<i>No. of Mills</i>	<i>Category</i>	<i>Installed Capacity</i>	<i>Production</i>	<i>% Share in Production</i>
21	Wood Based	4.82	4.32	19.26
18	Agro Based	1.35	1.31	5.84
499	Waste Paper	18.79	16.80	74.90
<b>538</b>	<b>Total</b>	<b>25.28</b>	<b>22.43</b>	<b>100</b>

All figures in Million tons

Over the year, due to various global factors and change of market synergy, the demand of virgin paper is almost stagnant. As on date, nearly 75% of paper production is met out from RCF based paper mills. Most of these mills produce packaging grade paper.

### Behaviour of Packaging Grade Paper Production as per market analogue<sup>6</sup>

<b>YEAR</b>	<b>TOTAL</b>
<b>2016-17</b>	9.824
<b>2017-18</b>	10.828
<b>2018-19</b>	11.795
<b>2019-20</b>	13.396
<b>2020-21</b>	15.609
<b>2021-22</b>	16.820

(All figures in Million tons)

The above table exhibits the trends of production of packaging grade of paper. Growth of this segment is attributed to the shift of the consumer to procure goods on line post the pandemic, increase in demand from the pharma sector and most recently, shifting of the packaging sector to single use plastic free regimen. We expect this 60% rise in the packing grade (base year 2016-17) sector to sustain momentum in future and foresee additional capacities coming in the segment.

### Conclusion:

Time has come for the paper sector to come together to frame functionalities with common goals, perhaps forming a Paper Guild, which can give the sector a concerted plan to deal with the emerging challenges as well as possible threats. The future of the sector rests with the quality growth of the packaging sector. This segment must put strategies in place to address the requirement of the packaging sector viz. light weigh kraft paper, adequate supply to the e-

<sup>5</sup> Census Survey of Indian Paper Industry

<sup>6</sup> Figures collected by Statistical Data Collection Team under Census Survey of Indian Paper Industry



commerce, retail and the pharma sector. Sector. All this has to be achieved with price competitiveness as well as the durability of the product.

Also, the sector needs to work on the supply chain network -particularly for waste paper as the input raw materials. The increasing dependence on waste paper imports needs to be addressed for the long term sectoral sustainability. The decreasing contribution of virgin fiber to the total production basket is also a cause of concern in this regard. As per common sectoral knowledge, a decrease in production basket of less than 25% from virgin fiber further decreases the quality of indigenous post consumer paper leading to increase in imports. Therefore, urgent interventions are needed for allocation of degraded forest lands for pulpwood plantations.



## MANAGEMENT

### PREAMBLE

Central Pulp and Paper Research Institute is an Autonomous Organization, registered under the Societies Registration Act. The affairs of the institute and its functionalities are executed as per a duly approved Memorandum of Association (MoA), as amended with due procedure from time to time.

As per the Section 6 of the MoA of CPPRI, the affairs of the institute are entrusted as required under Section 2 of the Societies Registration Act 1860 to a governing body, now referred to as the Council of Association (CoA) of CPPRI.

### COUNCIL OF ASSOCIATION (COA)

The Council of Association of Central Pulp & Paper Research Institute (CPPRI) is the supreme body consisting of members from Ministry of Commerce and Industry, Department of Science & Technology (DST), Council of Scientific and Industrial Research (CSIR), Indian Council of Forestry Research and Education (ICFRE), Indian Institute of Technology (IIT), Roorkee, Indian Newsprint Manufacturers Association (INMA), Indian Agro and Recycled Paper Mills Association (IARPMA), Indian Recycled Paper Mills Association (IRPMA) and Indian Pulp and Paper Technical Association (IPPTA) etc. The President of Council of Association of CPPRI is appointed by Government of India. Shri Anurag Jain, IAS, Secretary, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India is the present Chair of the Council.

Shri Anil Agrawal, IPS, Additional Secretary, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India steers the affairs of the Institute as the Chair of the Research Advisory Committee. The composition of the present council is placed below:-



## MEMBERS OF COUNCIL OF ASSOCIATION OF CPPRI

1.	<b>Shri Anurag Jain , IAS</b> Secretary Department for Promotion of Industry and Internal Trade (DPIIT) Ministry of Commerce and Industry, Government of India And President – Council of Association of CPPRI
2.	<b>Shri Anil Agrawal, IPS</b> Additional Secretary, (In-charge - Paper Sector) Department for Promotion of Industry and Internal Trade (DPIIT) Ministry of Commerce and Industry, Government of India
3.	<b>Director /Deputy Secretary (Shri. A.M. Kumar)</b> IF Wing -IPP Department for Promotion of Industry and Internal Trade (DPIIT) Ministry of Commerce and Industry, Government of India
4.	<b>Shri A.S. Mehta</b> Chairman Development Council for Pulp, Paper and Allied Industries and Managing Director, Star Paper Mills Limited
5.	<b>Shri Ravinder Gaur</b> Scientist D Department of Science and Technology Ministry of Science and Technology, Government of India
6.	<b>Dr.Rakesh Kumar</b> Director CSIR- National Environmental Engineering Research Institute, Nagpur
7.	<b>Dr.Dharam Dutt</b> Professor IIT Roorkee (Saharanpur Campus)
8.	<b>Shri S.D.Sharma, IFS</b> Deputy Director General (Research) Indian Council of Forestry Research and Education, Dehradun
9.	<b>Shri Rohit Pandit</b> Secretary General Indian Paper Manufactures Association (IPMA), New Delhi
10.	<b>Shri R. Vijay Kumar</b> Secretary General Indian Newsprint Manufacturers Association (INMA), New Delhi
11.	<b>Shri Pramod Agarwal</b>

	<b>President</b> Indian Agro and Recycled Paper Mills Association (IARPMA) and CMD- Rama Paper Mills Limited	
12.	<b>Dr. R. C. Rastogi</b> President, Indian Recycled Paper Mills Association (IRPMA) and CMD- Khatema Fibres Limited	
13.	<b>Shri Sanjay Singh</b> President Indian Pulp and Paper Technical Association (IPPTA)	
14.	<b>Shri Devesh Khaitan</b> Additional Director Wires & Fabriks (S.A.) Limited, Kolkata	
15.	<b>Dr. M.K.Gupta</b> Director Central Pulp & Paper Research Institute	<b>MEMBER SECRETARY</b>

### **RESEARCH ADVISORY COMMITTEE (RAC)**

The Research Advisory Committee (RAC) of Central Pulp & Paper Research Institute (CPPRI) comprises of prominent scientists and technologists and also representatives from Department for Promotion of Industry and Internal Trade ( DPIIT), Ministry of Commerce & Industry, Government of India, Department of Science and Technology (DST), Council of Scientific and Industrial Research (CSIR), Indian Council of Forestry Research and Education (ICFRE), Indian Institute of Technology (IIT), Roorkee etc. The RAC monitors the progress of various projects carried out by the institute under Project Based Support of DPIIT (Formerly Five-Year plan Projects). Shri Anil Agrawal, IPS, Additional Secretary, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India is the Chairman of RAC at present. The present composition of the RAC is placed below:-

### MEMBERS OF RESEARCH ADVISORY COMMITTEE OF CPPRI

1.	<b>Shri Anil Agrawal, IPS</b> Additional Secretary & Chairman Department for Promotion of Industry and Internal Trade (DPIIT) Ministry of Commerce and Industry, Government of India
2.	<b>Director /Deputy Secretary</b> IF Wing –IPP Department for Promotion of Industry and Internal Trade (DPIIT) Ministry of Commerce and Industry, Government of India
3.	<b>Dr. S.S. Gupta (since retired)</b> Senior Development Officer <b>Shri Hemant Kumar, Deputy Secretary (Paper)</b> Department for Promotion of Industry and Internal Trade (DPIIT) Ministry of Commerce and Industry, Government of India
4.	<b>Shri K. K. Sinha</b> (Tenure completed on 15.9.2017) Industrial Advisor (TSW, LEI) DIPP Department for Promotion of Industry and Internal Trade (DPIIT) Ministry of Commerce and Industry, Government of India (Since retired)
5.	<b>Chairman-cum-Managing Director</b> Hindustan Paper Corporation Limited
6.	<b>Dr. S. Chattopadhyaya</b> Faculty Incharge IIT - Roorkee (Saharanpur Campus)
7.	<b>Shri Rahul Khanna</b> President Indian Newsprint Manufacturers Association (INMA) and Executive Director - Emami Paper Mills Limited
8.	<b>Dr. R. C. Rastogi</b> President Indian Recycled Paper Mills Association (IRPMA) and CMD- Khatema Fibers Limited
9.	<b>Dr. N. V. Satyanarayana</b> Chief Scientist and Head, Business Development Indian Institute of Chemical Technology
10.	<b>Dr. Nishikant Bhardwaj</b> Director Avantha Centre for Industrial Research & Development
11.	<b>Shri Rahavendra Hebbar</b> General Manager (Development)

	JK Papers Limited
12.	<b>Dr. Vikas Rana</b> Head (C and P Division) Indian Council of Forestry Research & Education
13.	<b>Dr. Prashant Gargava</b> Member Secretary Central Pollution Control Board
14.	<b>Shri N. K. Jain</b> Director Valmet Technologies Co. Pvt. Limited (Since Retired)
15.	<b>Shri Sanjay Singh</b> Chief Operating Officer ITC Limited – Paperboards & Speciality Papers Division
16.	<b>Shri Pawan Agarwal</b> Chairman Kumaun Garhwal Chamber of Commerce and Industry (KGCCI: Paper Unit Chapter) and JMD - Naini Group of Industries
17.	<b>Dr. H. D. Kulkarni</b> Vice President (Plantations) ITC Ltd. – Paperboards & Speciality Papers Division
18.	<b>Shri Tushar Shah</b> Director Daman Ganga Group
19.	<b>Shri Anil Kumar</b> Executive Director and CEO Shreyans Industries Limited (Unit: Shreyans Papers)
20.	<b>Shri Pavan Khaitan</b> Managing Director Kuantum Papers Limited
21.	<b>Shri Arun G. Bijur</b> Vice Chairman SPB Projects and Consultancy Limited
22.	<b>Dr. M.K. Gupta</b> Director Central Pulp & Paper Research Institute



## STAFF

As on 31<sup>st</sup> March 2022, CPPRI's core team consisted of 15 Scientists, 11 Technical Staff and 3 Administrative & Finance Staff including the Director.

Team CPPRI is committed for providing quality services, support and assistance to Pulp, Paper & Allied Industries. The scientific staff is highly qualified and has vast experience in various areas of paper making such as Raw Material Preparation, Pulping and Bleaching, Stock Preparation and Paper Making, Paper Testing, Chemical Recovery, Energy Conservation, Environmental Management, Biotechnology, Product Development, Quality Control, Policy Matters etc. The list of permanent staff along with qualifications is annexed with this report.

## MAJOR ACHIEVEMENTS DURING 2021-22

The major achievement of CPPRI during the year 2021-2022 are as under:

### NABL Accreditation

The Environmental Management Division was successful in getting NABL accreditation for ambient air pollution parameters viz PM 10, PM 2.5, SO<sub>2</sub>, NO<sub>2</sub> and stack emissions pollution parameters viz SPM, SO<sub>2</sub>, NO<sub>2</sub>, O<sub>2</sub>, CO<sub>2</sub>, CO and H<sub>2</sub>S as well as water pollution parameters viz Sodium, Potassium, Calcium, Magnesium, Oil & Grease and Hardness.



**NABL Accreditation Certificate**

### Production of Dissolving Pulp from Whole Jute

National Jute Board is the apex body which takes care about cultivation and utilization of jute plant. Keeping in view of the fibre property National Jute Board made a plan for utilization of whole jute for production of dissolving grade pulp, which is the highest purity alpha cellulose pulp. After due experimentations, the challenge due to high silica content in the raw material was overcome and the team was successful in producing bleached pulp with +94% alpha cellulose with all other characteristics in the desired range as required for a dissolving grade pulp.

The trial of conversion of pulp to viscose and to fibre was carried out successfully at Aditya Birla Science and Technology Co. Ltd. Mumbai Maharashtra. Based on the successful trial results of laboratory scale, National Jute Board awarded a project for pilot plant scale trials entitled “**Production of Pilot Scale Whole Jute Dissolving Pulp for Viscose Fibre**”.

### **Development of Technology for Pilot Scale Bleaching of Pulp Employing Ozone**

Under RSC-DCPPAI funded project, an ozone based bleach reactor has been designed and commissioned at CPPRI. The equipment can carry out ozone bleaching of unbleached pulp up to 5 kg at various consistencies. Experimental results of ozone treatment to various pulp samples in this reactor are very encouraging.



### **Monitoring of Grossly Polluting Industries**

CPPRI carried out monitoring of the technological environmental status of over **126 Grossly Polluting Industries (GPI)** located in Ganga & Hindon River Basin in the states of Uttar Pradesh (Noida, Muzaffarnagar, Shamli, Baghpat, Meerut, Dadri) , Uttrakhand (Kashipur, Jaspur, Haridwar, Lalkuan, Roorkee) and Haryana (Karnal, Sonapat, Yamuna Nagar, Ambala, Kurukshetra). The units included diverse sectors like pulp and paper, electroplating, textiles, chemicals etc. For the year 2021- 22, CPPRI was nominated as Nodal Center for Pulp & Paper Sector under GPI Project.



Under the project CPPRI team along with respective State Pollution Control Board team conducted joint inspection for collection of primary and secondary data / information, samples of effluent generated, discharged, mixed liquor suspended solids ( MLSS) , upstream and down stream of the receiving tributary / river as well as ground water samples.

A detailed inspection report for each unit along with ETP adequacy evaluation, recommendation and suggestions are being submitted to the CPCB for necessary action at their end.

### **Firm Level Demonstration of Technologies and Productivity Enhancement for the Pulp & Paper Industry (UNIDO (IC-ISID) Project )**

Under the project a pre - pilot scale trials on membrane filtration were carried out at an agro based paper mill by UNIDO for treatment of paper machine back water and secondary treated effluent. The preliminary results were found to be encouraging. Based on the results, the configuration and specifications of skid mounted pilot scale Membrane filtration System for tender document were deliberated and finalized jointly by CPPRI &UNIDO.

### **Participation in Proficiency Testing Exercise**

As a mandatory requirement of NABL 17025: 2017 the Environmental Management Division participated in Proficiency Testing Exercise for pH , Total Dissolved Solids, Color, Sodium , Potassium , Calcium , Magnesium, Stack Emission (SO<sub>2</sub> & NO<sub>x</sub>) and Ambient Air (SO<sub>2</sub> & NO<sub>2</sub>) and achieved satisfactory Z score. The Performance of the division was satisfactory in PT exercises related to process of Sampling of Gases (SO<sub>2</sub> & NO<sub>x</sub>) in Stack Emission and Process of Sampling of Gases ( SO<sub>2</sub> & NO<sub>x</sub>) in ambient air.

### **International Cooperation**

### **Evaluation of Pulp and Paper making potential of Tree trimming samples from Alexandria Paper Mill-Egypt**

Tree trimming sample received Alexandria Paper mill were received and evaluation for various pulp and paper properties was carried out as per the scope of the project.

### **Other Achievements**

#### **Souvenir to mark 41 Glorious Years of CPPRI.**

- A souvenir covering institute's history, milestones and achievements and importance of paper was published by CPPRI on the occasion of completing of 41 Years of CPPRI. The Souvenir was prepared by Dr Nitin Endlay & released by Dr M.K. Gupta to mark the occasion.



## MOU Signed

- A MOU was signed in March 2022, with Nestle India for evaluation of rice straw and wheat straw for production of packaging grade paper board for food packaging.
- A Memorandum of Agreement was signed between Central Pulp & Paper Research Institute (CPPRI) & ICAR- Indian Agricultural Research Institute (IARI), New Delhi for joint collaborative study on Land Application of Pulp & Paper Mill Effluent through Modern Irrigation Methods.

## Training/ Skill Development

Six training programs were organized during the year 2021-2022.

## Research Paper Published

9 Research Papers were published in various journals during the year 2021-2022.

## Reports Prepared

More than 100 reports were prepared during the year 2021-2022.

## Infrastructure Developed

- An Ozone Reactor was fabricated and has been installed in the Pulping Bleaching Division.
- The following facilities were created for testing of Food Grade Packaging Paper:-
  - a) Atomic absorption spectrometer (AAS)**  
For metal ion analysis **Atomic Absorption Spectrometer (AAS)** was procured ("AnalytiKJena", Model No. ZEE nit700p). Instrument is being utilized for analysis of heavy metal analysis such as Al, As, B, Ba, Ca, Cd, Co, Cu, Cr, Fe, Hg, K, Mg, Mn, Na, Ni, Pb, Se, Sb, V, Zn, As, Sb, Se, and Hg in food packaging paper samples and water samples.



## Atomic absorption Spectrometer

### b) Gas chromatograph (GC)

Gas chromatograph (GC) was procured from Shimadzu (GC-2030). This instrument is being utilized for the analysis of PCPs and PCBs in food packaging paper samples. It can work on two detectors ECD and FID. Instrument possesses an auto-sampler with sampler capacity of 150 samples at a time. Auto-sampler can inject minimum 1  $\mu$ L to 10  $\mu$ L maximum sample at once. It can work on both split and split less mode.



Gas Chromatograph

## AWARDS

- Dr M.K. Gupta , Director CPPRI was honored as **Fellow of STA2021** by **The Society of Tropical Agriculture** at **International Conference on Agriculture, Horticulture & Food Science** at Shimla on December 29-30, 2021
- Smt. Anuradha Vipul Janbade, CPPRI was honored with 3rd Best Paper Award for her research paper presentation on the topic “**Addressing Safety Concerns for producing high quality food packaging papers**” during IPPTA’s Annual General Meeting-2022/708. The same paper was published in the IPPTA Journal (33 (3), 29-33).

## Technical and Consultancy Services

Technical and consultancy services were rendered to various pulp and paper mills and allied industries, technology and chemical suppliers by way of evaluation of raw materials, pulp and paper samples, pulping additives, deinking chemicals, sizing chemicals, stickies control agents, evaluation of suitability of newer grades of imported waste paper, characterization and analysis of various fibrous and non-fibrous raw materials, environmental samples as well as providing assistance in trouble shooting, adequacy assessment, performance evaluation of various process operations, effluent treatment plant and pollution control equipment leading to internal revenue generation of around Rs 326.58 lacs.



## Receipt and Expenditure

During the year 2021-22 total receipt of the Institute were Rs. 1276.58 Lacs which includes Rs. 95.00 Lacs as Grant in Aid under Project Based Support and Rs. 855.00 Lacs under the head Development Council for Pulp & Paper & Allied Industries. Its also includes Internal Revenue Generation (IRG) of Rs. 326.58 lacs generated from various services viz testing consultancy and training etc. offered by the Institute.

The Total Expenditure during the year was Rs. 1354.92 Lacs including Rs. 159.68 Lacs for Procurement of Assets.

## **RESEARCH PROJECTS EXECUTED**

### **RESEARCH PROJECTS EXECUTED UNDER PROJECT BASED SUPPORT FUNDS**

#### **CENTRE OF EXCELLENCE FOR MULTIPLICATION OF QUALITY PLANTING STOCK OF SELECTED TREE SPECIES FOR INDIAN PULP AND PAPER INDUSTRY**

DPIIT-GOI has awarded this project to CPPRI. The objectives of the project are :-

- To select various families and genotypes of five indigenous tree species with potential as alternate raw material for pulp and paper industry.
- To study the long term tree improvement and wood science for selected indigenous tree species with multiplication and deployment of promising genotypes.
- To characterize different genotypes rapidly for physical and chemical properties using conventional and non-destructive technologies using Near-Infrared (NIR) Spectroscopy
- To develop clonal multiplication areas and production populations for future research and commercial deployment
- To ultimately establish Centre of Excellence for Multiplication of Quality Planting Materials of selected indigenous tree species with higher productivity

The project activities have been initiated and a kickoff meeting with team of both institutes viz CPPRI and FRI was held at CPPRI Saharanpur on 8<sup>th</sup> March 2022. During the meeting details of project activities were discussed and a plan of execution of same in time bound manner was carried out.



PBS project meeting with FRI and CPPRI scientists in CPPRI board room



Visit of plantation site by FRI and CPPRI Scientists

### **BIOPULPING OF LIGNOCELLULOSIC MATERIAL TO REDUCE CHEMICAL AND ENERGY DEMAND IN VARIOUS PULPING PROCESSES.**

The studies under the project involves investigation of fungal treatment of various raw materials for selective lignin degradation during Biopulping to achieve chemical & energy savings as well as improvement in strength properties of paper. The project also aims to set up a pilot plant for validation of laboratory studies with respect to reduction in chemical, energy demand and pulp properties. Under the project, various samples were collected from the campus of CPPRI by scrapping the white patches observed in the bark of tress and one mushroom using scalpel. Potato dextrose agar was prepared and poured into six petri plates equally and was cooled down. The samples were taken using swabs and were spread in the plates in zig zag motion. Multiple colonies of fungi were obtained after 72 hrs of incubation. From the mixed cultures, the white colonies were isolated and were subcultured again for continuing the experiment further.

Also, in parallel, proximate analysis of wood and agro samples was carried put. Various pulping conditions were optimized and pulps were prepared. Further studies are in progress.

### **SETTING UP OF THE STATE-OF-THE-ART CHEMICAL RECOVERY LABORATORY:**

Chemical recovery process is the main sustaining step for paper manufacture. An effective chemical recovery process helps the sector to be environmentally compliant and helps it to be less resource intensive. With the steps under way to allocate degraded forests for pulpwood plantations, more and more units are likely to shift to using wood from captive pulpwood plantations. This will necessitate the mills to increase existing capacities of the Chemical



Recovery Operations. Also, in the times to come, new and larger chemical recovery boilers will be used by the industry. This will require a state of the art chemical recovery laboratory to provide the technical hand holding for the Indian paper sector.

### **SETTING UP OF A PULP AND PAPER MILL BASED BIO-REFINERY LABORATORY:**

Pulp and paper mills are logical hubs of bio-refinery activity. About half the organic mass that enters in a traditional pulp and paper mill is incinerated. This is the most conservative use of any biomass. Full integration of the incoming biomass and other inputs for simultaneous production of paper, chemical and energy is the major objective of this bio refinery based project so that economics of the mills could be improved. By integrating bio-refinery activities mills have the opportunities to produce bio-energy and bio-products along with pulp and paper.

### **SETTING UP OF WASTE PAPER RECYCLING PROMOTION CENTRE:**

Setting up of Waste Paper Recycling Promotion Center (WPRPC) in Delhi and Chennai, is a step forward to make the waste paper collection sector organized and thus increasing the waste paper collection rate in the country.

The genesis of the idea of setting up of the WPRPC lies in the provision of Solid Waste Management Rules, 2016 and the proposed National Material Recycling Policy. The two proposed centers shall execute the following activities

- Promote collection/increased use of waste paper
- Study on Stable Supply Chain and reliable volume of waste paper
- Quality monitoring and improvement.

### **PROJECTS SPONSORED UNDER GRANTS RECEIVE FROM DEVELOPMENT COUNCIL FOR PULP, PAPER AND ALLIED INDUSTRIES (DCPPAI)**

#### **LAND APPLICATION OF TREATED EFFLUENT FROM PULP & PAPER MILL AND EVALUATION OF ITS IMPACT ON SOIL, GROUND WATER PROPERTIES & CROP PRODUCTIVITY (JOINT PROJECT OF CPPRI & IARI )**

The objective of this project jointly executed by CPPRI & Indian Agricultural Research institute ( IARI-Pusa New Delhi) is utilization of treated effluents for land application (agriculture / horticulture) to conserve fresh water and evaluation / monitoring of the impact of land application of treated effluent on soil properties, ground water quality as well as crop health.

Under the project, the benchmarking survey of the soil (edaphic), treated effluent and ground water quality characteristics of the two selected mill sites was carried out. The site as per its orientation and area requirement for laying out field trials was also finalized. Samples of soil and treated effluent were also collected.



**Bench Marking Survey for Soil and Water Analysis by IARI & CPPRI Scientists Prior to Field Experimentation at Mill Site**

### **DEMONSTRATION OF OZONE TREATMENT TECHNOLOGY OF INDIGENOUS RAW MATERIAL PULP AT PILOT PLANT SCALE (CPPRI)**

The aim of the project was to facilitate the scaling up of ozone bleaching technology by way of fabrication of pilot scale ozone reactor. The fabrication of ozone reactor was completed, installed at Physical Chemistry Pulping and Bleaching (PCPB) Division. After installation of ozone reactor, the ozone bleaching of wood/agro pulps was successfully carried out.



Ozone Bleaching in Progress

#### **SCREENING OF PARENTS FOR CLONAL FORESTRY AND HYBRIDIZATION FOR HIGHER PRODUCTIVITY IN EUCALYPTUS (JOINT PROJECT OF CPPRI-FRI-SPM-IPMA)**

After completion of proximate analysis, pulping and bleaching of 9 selected potential parents plant, the saplings of selected species of eucalyptus were deployed for the field trials at various locations.

#### **STUDY ON DELIGNIFICATION OF AGRO RESIDUE RAW MATERIALS USING DEEP EUTECTIC SOLVENTS OR/ AND IONIC LIQUIDS (JOINT PROJECT OF CPPRI-ACIRD)**

The aim of the project is to explore an energy conserving & environmental friendly approach for pulping of agro residue raw materials using Deep Eutectic Solvents (DES) as an alternate to conventional pulping chemicals. After procurement of chemicals, pulping of bagasse by conventional chemicals and eutectic solvent was carried out. The results indicates that efficacy of eutectic solvent is better in case of mechanical pulp production as compared to chemical pulp production.

#### **BACTERIAL CELLULOSE PRODUCTION FOR DIVERSE APPLICATIONS IN PULP AND PAPER SECTOR**

The project involves laboratory scale production and characterization of bacterial cellulose and investigation of its application in paper and paper sector. Optimization of pH and temperature conditions for Bacterial Cellulose (BC) production from HS media have been





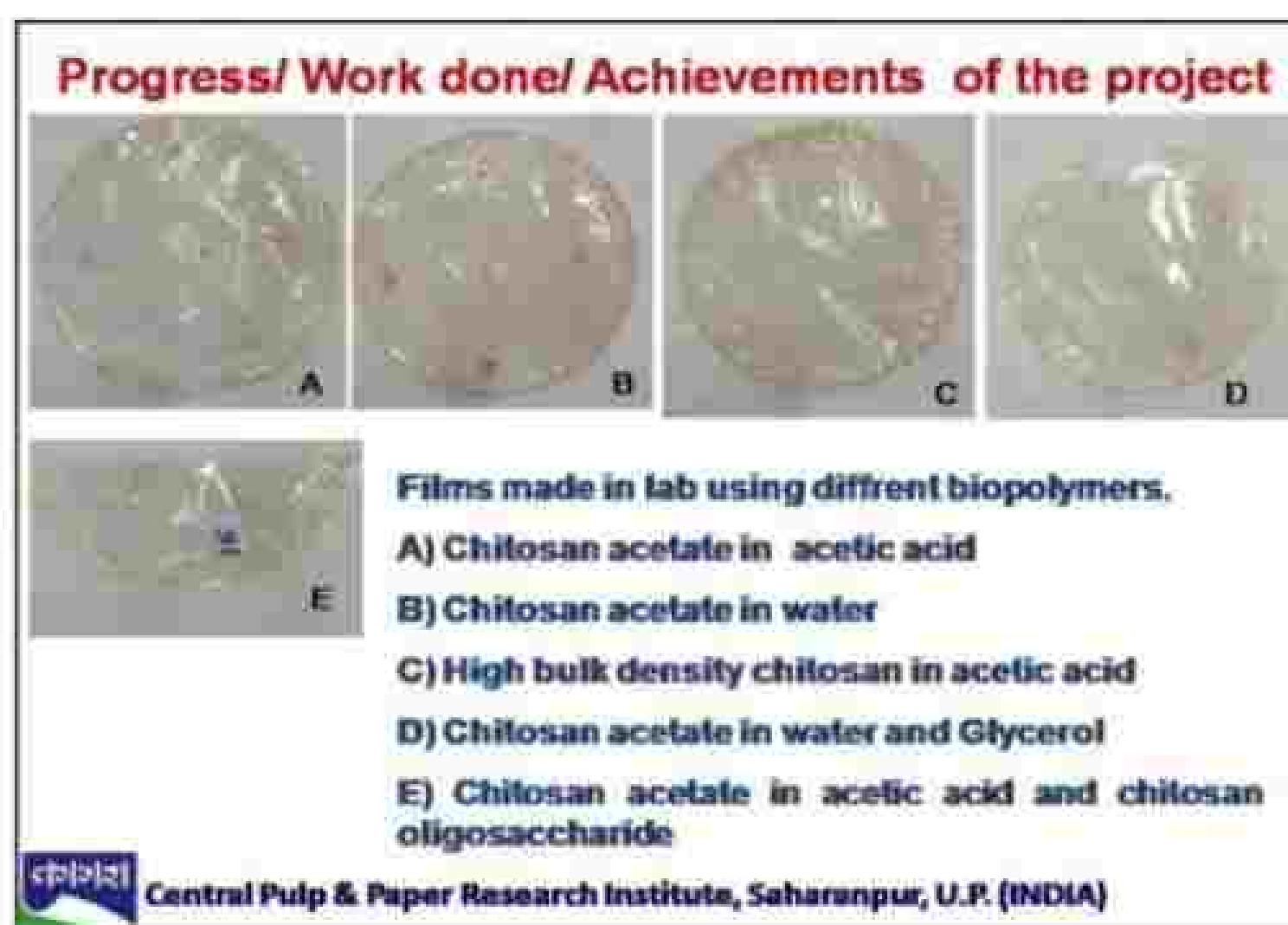
carried out. Purification of BC produced and optimization of process parameters such as BC production at different pH and temperature, mixed culture use, static and submerged culturing of isolates, aerated condition, different media combination were done.

Various degraded sugars emanating from Pulp and Paper mills undertaken as a substrate for Bacterial Cellulose production

### **BIOPOLYMERIC APPROACH FOR IMPROVEMENT OF MECHANICAL AND BARRIER PROPERTIES OF PACKAGING PAPER/ PAPERBOARD THROUGH SURFACE APPLICATION**

A project under RSC- DCPPAI was initiated with an approach of focusing the application of biopolymers on paper for achieving barrier properties towards water, oils and moisture. Detailed literature survey on various biopolymer which can be used for surface application of paper/ paperboard has been completed. Purchase of some commercially available chemicals/ biopolymers was done. The Purchased biopolymers were chitosan of different degree of deacetylation (80% and 90%) chitosan acetate, chitosan lactate, chitosan oligosaccharide and high bulk density chitosan. Methodology of film making using chitosan and its derivative is developed. Wet-end application of different biopolymers were done and testing is under progress Specification of equipment (WVTR and OTR) has been finalized and procurement is under progress. Initial requirements for the Installation and commissioning of equipment are under progress.

The upcoming activities of the project include tender publication and procurement of equipment, search of suppliers to provide different commercially available chemicals/ biopolymers e.g. corn zein, soy protein, starch, PLA, PHA, etc. and to develop methodology to test different film properties.



Slide on Biopolymers

## OTHER STUDIES OF IMPORTANCE

### PRODUCTION OF PILOT SCALE WHOLE JUTE DISSOLVING PULP FOR VISCOSE FIBRE SPONSORED BY NATIONAL JUTE BOARD, (NJB), KOLKATA

Based on the encouraging results of lab scale trials of whole jute high purity alpha cellulose pulp, a proposal on “**Production of Pilot Scale Whole Jute Dissolving Pulp for Viscose Fabre**” was prepared and submitted to National Jute Board, Kolkata. The NJB accepted the proposal in December 2021. The pilot scale studies are currently in progress.



The Whole jute plant from west Bengal transported by NJB, Kolkata



### **MONITORING OF GROSSLY POLLUTING INDUSTRIES (CPCB SPONSORED PROJECTS)**

CPPRI carried out monitoring of the technological environmental status of over 126 Grossly Polluting Industries (GPI) located in Ganga & Hindon River Basin in the states of Uttar Pradesh (Noida, Muzaffarnagar, Shamli, Baghpat, Meerut, Dadri), Uttarakhand (Kashipur, Jaspur, Haridwar, Lalkuan, Roorkee) and Haryana (Karnal, Sonapat, Yamuna Nagar, Ambala, Kurukshetra). The units included diverse sectors like pulp and paper, electroplating, textiles, chemicals etc. For the year 2021-22 CPPRI was nominated as Nodal Center for Pulp & Paper Sector under GPI Project.

Under the project CPPRI team along with respective State Pollution Control Board team conducted joint inspection for collection of primary and secondary data / information, samples of effluent generated, discharged, mixed liquor suspended solids (MLSS), upstream and down stream of the receiving tributary / river as well as ground water samples.

A detailed inspection report for each unit along with ETP adequacy evaluation, recommendation and suggestions are being submitted to the CPCB for necessary action at their end.

### **FIRM LEVEL DEMONSTRATION OF TECHNOLOGIES AND PRODUCTIVITY ENHANCEMENT FOR THE PULP & PAPER INDUSTRY (UNIDO (IC-ISID) PROJECT IN ASSOCIATION WITH CPPRI)**

Under the project, pre-pilot scale trials on membrane filtration were carried out at an agro based paper mill for treatment of paper machine back water and secondary treated effluent. The preliminary results were found to be encouraging. Based on the results, the configuration and specifications of skid mounted pilot scale Membrane filtration System for tender document were deliberated and finalized jointly by CPPRI & UNIDO.

### **ENVIRONMENTAL AUDIT OF TRIDENT LTD., BARNALA**

This study was awarded to CPPRI by Punjab Pollution Control Board in context of the recommendation of the committee constituted by National Green Tribunal which comprised of Central Pollution Control Board (CPCB), Punjab State Pollution Control Board (PPCB) and District Administration Barnala (Punjab).

CPPRI team undertook three detailed plant visits for collection of primary and secondary data & carrying out ETP monitoring and performance evaluation study, ambient and stack monitoring and ground water and upstream and down stream water sampling. A detailed presentation was given by Dr Nitin Endlay before PPCB at Chandigarh on outcomes of the study and finally comprehensive report was submitted to PPCB.



### **FEASIBILITY OF ZERO LIQUID DISCHARGE IN WOOD BASED & AGRO BASED PULP & PAPER MILLS PRODUCING WRITING & PRINTING GRADE OF PAPER SPONSORED BY INDIAN PAPER MANUFACTURERS ASSOCIATION**

Under the project an exhaustive study on the level of existing fresh water consumption, recycling of back water, water balance, technologies available to facilitate ZLD, techno-economic feasibility of ZLD in Indian perspective was carried out. The report preparation is under progress.

### **ETP ADEQUACY ASSESSMENT & PERFORMANCE EVALUATION OF EXISTING EFFLUENT TREATMENT PLANT AT ANDHRA PAPER LTD (UNIT KADIYAM)**

Under the project, detailed information & data related to mill, raw material consumption, production, ETP units specification, fresh water consumption, waste water generation as well as effluent samples from various units of ETP were collected through composite sampling and analysed. A detailed report on ETP adequacy and its performance was submitted to the mill.

### **WATER & MATERIAL BALANCE OF BINDALS PAPERS MILLS LTD, MUZAFFARNAGAR**

Under the study a section wise comprehensive water and material balance was carried out of the mill. Further areas were identified to reduce the fresh water consumption

### **ADEQUACY OF EXISTING AND PROPOSED EFFLUENT TREATMENT PLANT (ETP) FOR TREATMENT OF EFFLUENT TO BE GENERATED FROM PROPOSED CAPACITY EXPANSION (UNIT-I) OF 240 TPD KRAFT PAPER FROM 180 TPD AGRO RESIDUES AND 60 TPD EXISTING WASTE PAPER AT SILVERTON PAPERS LIMITED, MUZAFFARNAGAR**

Under the project, detailed information & data related to mill, raw material consumption, production, ETP units specification, fresh water consumption, waste water generation as well as effluent samples from various units of ETP were collected through composite sampling and analysed. Estimation of Water balance at present and at proposed capacity expansion was made and consequently volume of effluent and pollution load to be



generated was estimated. A detailed report on ETP adequacy along with recommendations was submitted to the mill.

**ADEQUACY OF EXISTING EFFLUENT TREATMENT PLANT (ETP) FOR TREATMENT OF EFFLUENT TO BE GENERATED FROM PROPOSED CAPACITY EXPANSION (MACHINE-II) OF 150 TPD KRAFT PAPER FROM AGRO RESIDUES AND EXISTING WASTE PAPER MACHINE-I (250 TPD), AT DISHA INDUSTRIES PVT. LIMITED, MUZAFFARNAGAR , U.P.**

Under this study, detailed information & data related to mill, raw material consumption, production , ETP units specification , fresh water consumption , waste water generation as well as effluent samples from various units of ETP were collected through composite sampling and analysed. Estimation of Water balance at present and at proposed capacity expansion was made and consequently volume of effluent and pollution load to be generated was estimated. A detailed report on ETP adequacy along with recommendations was submitted to the mill

**WATER AUDIT OF YASH PAKKA LTD, FAIZABAD, U.P.**

A comprehensive water audit including quantification of fresh water consumption , waste water discharge , recycled water was carried out along with calibration of flowmeters and identification of areas for reducing fresh water consumption. A detailed report on ETP adequacy along with recommendations was submitted to the mill

**ADEQUACY OF EXISTING EFFLUENT TREATMENT PLANT (ETP ) FOR TREATMENT OF EFFLUENT TO BE GENERATED FROM PROPOSED CAPACITY EXPANSION OF 200 TPD MEDIA KRAFT PAPER FROM 100 % WASTE PAPER AT SUYASH PAPER MILLS, BASTI (U.P.)**

Under this study, detailed information & data related to mill, raw material consumption, production , ETP units specification , fresh water consumption , waste water generation as well as effluent samples from various units of ETP were collected through composite sampling and analysed. Estimation of Water balance at present and at proposed capacity expansion was made and consequently volume of effluent and pollution load to be generated was estimated. A detailed report on ETP adequacy along with recommendations was submitted to the mill

**ADEQUACY OF EXISTING WASTE WATER TREATMENT PLANT (WWTP) FOR TREATMENT OF WASTE WATER GENERATED FROM SLAUGHTERING OF 150 BUFFALO ANIMALS/DAY**

With an objective to diversify its services to other sector the above study was taken up by CPPRI. Under this study, detailed information & data related to mill, slaughtering process, production, ETP units specification, fresh water consumption, waste water generation as



well as effluent samples from various units of ETP were collected through composite sampling and analysed. A detailed report on ETP adequacy along with recommendations was submitted to the unit.

#### **VERIFICATION OF ZERO LIQUID DISCHARGE (ZLD) STATUS AND ADEQUACY ASSESSMENT OF BACK WATER TREATMENT SYSTEM FOR PROPOSED CAPACITY EXPANSION FROM 300 TPD TO 600 TPD KRAFT PAPER PRODUCTION, MARUTI PAPERS LIMITED, SHAMLI, (U.P.)**

Under this study, detailed information & data related to mill, raw material consumption, production, existing ETP units specification, fresh water consumption, waste water generation as well as effluent samples from various units of ETP were collected through composite sampling and analysed. Estimation of Water balance at present and at proposed capacity expansion was made and consequently volume of backwater and pollution load to be generated was estimated. A detailed report on ZLD Feasibility & existing ETP adequacy along with recommendations was submitted to the mill

#### **FEASIBILITY OF ZERO LIQUID DISCHARGE (ZLD) AT DHANLAXMI AGRO MILL (INDIA) PRIVATE LIMITED, BAZPUR, UDHAM SINGH NAGAR, UTTARAKHAND**

The study was carried out to assess the feasibility of the proposal by an upcoming mill to operate on ZLD at 100 TPD kraft paper productions from 100 % waste paper.

#### **PARTICIPATION IN PROFICIENCY TESTING EXERCISE**

As a prerequisite for NABL accreditation Environmental Management Division successfully participated in Proficiency Testing Exercise for the following parameters:-

pH, Total Dissolved Solids, Color, Sodium, Potassium, Calcium, Magnesium, Stack Emission (SO<sub>2</sub> & NO<sub>x</sub>) and Ambient Air (SO<sub>2</sub> & NO<sub>x</sub>) and achieved satisfactory Z score. The Performance of the division was satisfactory in PT exercises related to process of Sampling of Gases (SO<sub>2</sub> & NO<sub>x</sub>) in Stack Emission and Process of Sampling of Gases (SO<sub>2</sub> & NO<sub>x</sub>) in ambient air.

## PROJECTS SPONSORED BY PULP, PAPER AND ALLIED INDUSTRIES

### PULPING AND BLEACHING DIVISION

1. Mechanical pulping and bleaching of Jute caddy- Sparkle Eco Innovations private Limited, Gujarat
2. Evaluation of Sisal Fibre- Innovate Pulp and Paper, Noida
3. CTMP of Rice Straw- Fuma lab Pvt Ltd,
4. SCP pulping of Subabul to Produce semichemical pulp- Mehali Papers Private Limited, Paper Board Division, Gujrat.
5. TCF bleaching of Bagasse pulp- Yash Pakka, Faizabad
6. Utilization of Areca nuts fibrous waste for production of various grades of pulp- Terra Biomaterials, Bangaluru
7. Pulping optimization followed by bleaching optimization of hardwood and softwood- Agro Pulping Pvt Ltd, Chennai
8. NSSC pulping of Subabul of produce semichemical pulp - Mehali papers Private Limited Paper Board Division, Gujrat
9. Pulping of hard wood samples- Satia Industries Limited ,Muktsar, Punjab
10. Optimization of CTMP process of rice straw for its utilization in production of molded fiber product- Fibranium Manufacturing Pvt. Ltd., GovindaVadi Village, Kanchipuram, Tamil Nadu

### STOCK PREPARATION AND PAPER MAKING DIVISION

Evaluation of 57 Pulp samples received from the following sources was carried out for various Physical and Strength Properties.

- Avantha Holdings Ltd., Maharashtra
- Aadhya Enterprises, Dehradun, Uttarakhand
- Arihant Paper Board Mills, Jind, Haryana
- Claridge Moulded Fiber Ltd., Baddi, Himachal Pradesh
- Department of Biotechnology, D. D. U. Gorakhpur University, Gorakhpur
- Department of Textile Engineering, MRSPTU, Bhatinda, Punjab
- Everest Industries Limited, Bhagwanpur, Uttarakhand
- Everest Industries Limited, Balasore, Orissa
- Everest Industries Limited, Coimbatore, Tamilnadu
- Everest Industries Limited, Nasik, Maharashtra

- Jolly Board Ltd., Aurangabad, Maharashtra
- Naini Papers Ltd., Kashipur
- Paper Fiber Impex, New Delhi
- Pragati International, New Delhi
- Shiva Handmade Papers, Haridwar, Uttarakhand
- Siddhartha Papers Pvt. Ltd. Unit-2, Kashipur, Uttarakhand
- Sparten Pulp Pvt. Ltd., Gujarat
- Swastik Hath Kagajam, Kalpi, Uttar Pradesh
- Visaka Industries Ltd., Nalgonda, Telangana
- V.L.S. Fibre, Chennai, Tamil Nadu

#### **Evaluation of 28 Wet-end Chemicals**

Wet end chemicals received from the following entities were evaluated for efficacy:-

- Amazon Papyrus Chemicals (P) Ltd., Sangareddy Distt, Telangana
- Corbital Corporation, Jaipur, Rajasthan
- Garg Duplex, Muzaffarnagar
- Jyoti Industries, Sabarkantha, Gujarat
- Khanna Paper Mills, Amritsar, Punjab
- Ladhar Paper Mills, Punjab
- Maxim Chemicals, Greater Noida, Uttar Pradesh
- Rajeev Chemicals Private Ltd., Ghaziabad, Uttar Pradesh
- Rico Auto Industries, Gurgaon, Haryana

#### **Technical Know-how on Repulpability and Paper Making Potential of 65 Packaging Materials used by Fast Moving Consumer Goods Companies (FMCG) and Packaging Industries**

The above study was done for the samples received from the following organizations:-

- Ajit Industries (P) Ltd., Sonapat, Haryana
- Anna Polymers, Alappuzha, Kerala
- Creative Polypack Ltd., West Bengal, India
- Evirocor Packaging India Pvt. Ltd., Bangalore
- Hindustan Unilever Ltd. Research Centre, Mumbai
- Huhtamaki PPL Ltd, Raigad, Maharashtra
- ITC Ltd., Chennai, Tamilnadu
- ITC Ltd. PSPD, Secunderabad, Telangana
- JK Paper Ltd., New Delhi
- Parijat Paper Mills Ltd., Muzaffarnagar



- Recoh EHS Services, Vadodra, Gujarat
- Shubh International, Bengaluru, Karnataka
- Siddhomal Paper Conversion Co. Pvt. Ltd., Ghaziabad, Uttar Pradesh
- Uniliver Industries Pvt. Ltd., Mumbai, Maharashtra
- Vacmet India Limited Unit-III, Mathura, Uttar Pradesh
- Wacker Chemie India Pvt. Ltd., Mumbai, Maharashtra
- Zume India Private Ltd., Mumbai, Maharashtra

## ENVIRONMENTAL MANAGEMENT DIVISION

- Environmental Audit - Trident Ltd, Barnala Punjab
- Feasibility of Zero Liquid Discharge in Wood Based & Agro Based Pulp & Paper Mills producing Writing & Printing Grade of Paper sponsored by Indian Paper Manufacturers Association
- ETP Adequacy Assessment & Performance Evaluation of Existing Effluent Treatment Plant - Andhra Paper Ltd ( Unit Kadiyam)
- Water & Material Balance - Bindals Papers Mills Ltd, Muzaffarnagar
- Adequacy of Existing and Proposed Effluent Treatment Plant (ETP) For Treatment of Effluent to be Generated from Proposed Capacity Expansion (Unit-I) of 240 Tpd Kraft Paper from 180 TPD Agro Residues and 60 TPD Existing Waste Paper - Silverton Papers Limited, Muzaffarnagar
- Adequacy of Existing ETP for Treatment of Effluent to be Generated from Proposed Capacity Expansion (Machine-II) of 150 TPD Kraft Paper From Agro Residues and Existing Waste Paper Machine-I (250 TPD) - Disha Industries Pvt. Limited, Muzaffarnagar , U.P.
- Water Audit – Yash Pakka Ltd, Faizabad, U.P.
- Adequacy of Existing ETP for Treatment of Effluent to be Generated from Proposed Capacity Expansion of 200 TPD Media Kraft Paper from 100 % Waste Paper - Suyash Paper Mills, Basti (U.P.)
- Adequacy of Existing Waste Water Treatment Plant (WWTP) for Treatment of Waste Water Generated from Slaughtering of 150 Buffalo Animals/Day
- Verification of Zero Liquid Discharge (ZLD) Status and Adequacy Assessment of Back Water Treatment System for Proposed Capacity Expansion from 300 TPD to 600 TPD Kraft Paper Production-Maruti Papers Limited, Shamli, (U.P.)
- Feasibility of Zero Liquid Discharge (ZLD)- Dhanlaxmi Agro Mill (India) Private Limited, Bazpur, Udham Singh Nagar, Uttarakhand.



## BIOTECHNOLOGY AND FOOD GRADE TESTING LAB

- Various water samples from industries were analysed for heavy metals **Pb, Hg, Ni, As, Cd, Co, Fe, Zn, Cr, Mn, Ca and Mg** under GPI studies from different paper mills and textile mills near Hindon and Ganga basin.
- Analyzed one pulp sample for its **total microbial count**, received from KPPL, Kerela.

## TECHNICAL AND CONSULTANCY SERVICES

Technical services were rendered to the following mills and organizations by analyzing various samples of fibrous and non fibrous raw materials, pulp, paper, black liquor, lime, lime sludge, rice husk, green liquor, white liquor, effluents, ground water, solid waste etc.

- Aadhya Enterprises, Dehradun, Uttarakhand
- Adya Enterprises, Rewa, Madhya Pradesh
- Agarwal Enterprises, Patna, Bihar
- Aggarwal Zarda Factory Private Limited, Saharanpur, Uttar Pradesh
- Aiman Tanveer, Gorakhpur, Uttar Pradesh
- Ajit Industries Private Limited, Sonipat, Haryana
- Alok Printers, Agra, Uttar Pradesh
- Aman Bricks Field, Saharanpur, Uttar Pradesh
- Amazon Papyrus Chemicals Private Limited, Hyderabad, Telangana
- Amit Printers Press, Mathura, Uttar Pradesh
- Anand Brothers Offset Printers, Sonipat, Haryana
- Anandeshwar Industries Private Limited, Kanpur Dehat, Uttar Pradesh
- Andhra Paper Limited, Rajamundry, Andhra Pradesh
- Andhra Paper Limited, Kadiyam, Andhra Pradesh
- Anna Polymers, Alappuzha, Kerala
- Anupam Prakshan, Mathura, Uttar Pradesh
- Aradhya Group, Rewa, Madhya Pradesh
- Arihant Paper Board Mills, Jind, Haryana
- Ashok Rai Boards, Chennai, Tamil Nadu
- Avantha Holdings Limited, Gadchiroli, Maharashtra
- Bajaj Hindustan Sugar Limited, Saharanpur, Uttar Pradesh
- Bank Note Paper Mill India Private Limited, Mysuru, Karnataka
- Bhagwanti Gram Udyog Mandal, Kurukshetra, Haryana
- Bhagwat Printing Press, Mathura, Uttar Pradesh
- Bhagwati Kripa Paper Mills Private Limited, Jaipur, Rajasthan
- Bhol Ram Papers & Power Private Limited, Moradabad, Uttar Pradesh
- Bihar Agricultural Management & Extension Training, Patna, Bihar
- Bihar Skill Development Mission, Patna, Bihar
- Bihar State AIDS Control Society, Patna, Bihar
- Bihar State Government Press, Patna, Bihar



- Bihar State Power Holding Corporation Limited, Patna, Bihar
- Bihar State Text Book Publishing Corporation Limited, Patna, Bihar
- Bihar Vidyalya Pariksha Samiti, Patna, Bihar
- Bilt Graphic Paper Products Limited, New Delhi
- Bilt Graphics Paper Products Limited, Ballarpur, Maharashtra
- Bindals Papers Mills Limited, Muzaffarnagar, Uttar Pradesh
- Board of School Education Haryana, Bhiwani, Haryana
- Box Corugators and Offset Printers, Bhopal, Madhya Pradesh
- Burda Druck India Private Limited, Greater Noida, Uttar Pradesh
- C2C Consultancy, Udumalpet, Tirupur, Tamil Nadu
- Capital Business Systems Private Limited, New Delhi
- Central Board of Secondary Education, New Delhi
- Central Pollution Control Board, New Delhi
- Centre for Environmental, Anna University, Chennai, Tamil Nadu
- Century Pulp & Paper, Lalkua, Uttarakhand
- Chattisgarh Pathya Pustak Nigam, Raipur, Chattisgarh
- Chaudhary Charan Singh University, Meerut, Uttar Pradesh
- Chaudhary Devi Lal University, Sirsa, Haryana
- Claridge Moulded Fibre Limited, Solan, Himachal Pradesh
- Corbital Corporation, Jaipur, Rajasthan
- Creative Polypack Limited, Howrah, West Bengal
- Deepak Printers & Publishers, Nainital, Uttarakhand
- Delhi Bureau of Text Books, New Delhi
- Deoria Paper Mills Limited, Deoria, Uttar Pradesh
- Din Dayal Upadhyay University, Gorakhpur, Uttar Pradesh
- Disha Industries Private Limited, Muzaffarnagar, Uttar Pradesh
- DORD, Indian Institute of Technology Kanpur, Uttar Pradesh
- Dr. A.P.J. Abdul Kalam Technical University, Lucknow, Uttar Pradesh
- Dr. Ramratan, Bathinda, Punjab
- DSG Papers Private Limited, Patiala, Punjab
- Dynamic Textbooks Printers Private Limited, Bijoli, Uttar Pradesh
- Employment News (Publications Division), New Delhi
- Everest Industries Limited, Bhagwanpur, Uttarakhand
- Everest Industries Limited, Balasore, Odisha
- Everest Industries Limited, Coimbatore, Tamil Nadu
- Everest Industries Limited, Nasik, Maharashtra
- Evirocor Packaging India Private Limited, Bengaluru, Karnataka
- Excel Corporation, Chandigarh
- Fibranium Manufacturing Private Limited, Kanchipuram, Tamil Nadu



- Fuma Labs Private Limited, Pune, Maharashtra
- Ganesh Printers, Kolhapur, Maharashtra
- Garg Duplex & Paper Mills Private Limited, Muzaffarnagar, Uttar Pradesh
- General Offset Printing Press Private Limited, Prayagraj, Uttar Pradesh
- Government Printing and Stationery, Gandhinagar, Gujarat
- G-Tech Print Works, Mathura, Uttar Pradesh
- Gulshan Arora, Mohali (S.A.S.) Nagar, Punjab
- Gyan Ganga, New Delhi
- Gyan Vigyan Educare, New Delhi
- Harsh Enterprises, Kanpur, Uttar Pradesh
- Haryana School Shiksha Pariyojna Parishad, Panchkula, Haryana
- Hechmen Engineering Consultant Private Limited, Yamuna Nagar, Haryana
- Hindustan Brick Field, Saharanpur, Uttar Pradesh
- Hindustan Unilever Limited, Mumbai, Maharashtra
- Hitarth Hitesh Kumar Shukla, Ahmedabad, Gujarat
- Horizon Packs Private Limited, Udham Singh Nagar, Uttarakhand
- HT Media Limited, Greater Noida, Uttar Pradesh
- Huhtamaki India Limited, Raigad, Maharashtra
- K. Gujral Punjab Technical University, Kapurthala, Punjab
- Indian Paper Manufacturers Association (IPMA), New Delhi
- Innovate Pulp and Paper LLP, Gautam Buddha Nagar, Uttar Pradesh
- Insan Paper & Boards, Ladwa, Haryana
- ITC Limited - PSPD Bhadrachalam, Sarapaka, Telangana
- ITC Limited - PSPD Kovai, Coimbatore, Tamil Nadu
- ITC Limited - PSPD, Secunderabad, Telangana
- ITC Limited - PSPD Tribeni, Hooghly, West Bengal
- ITC Limited, Chennai, Tamil Nadu
- ITC Limited, Thiruvottiyaur, Tamil Nadu
- J K Paper Limited, New Delhi
- J K Paper Limited, Rayagada, Odhisa
- J K Paper Limited, Surat, Gujarat
- Jai Ganesh Papers, Haridwar, Uttarakhand
- Jai Narayan Vyas University, Jodhpur, Rajasthan
- Janki Newsprint Limited, Meerut, Uttar Pradesh
- Jolly Board Limited, Aurangabad, Maharashtra
- Jyoti Industries, Sabarkantha, Gujarat
- K R Pulp and Papers Limited, New Delhi
- Karyalya Bihar Sanskrit Shiksha Board, Patna, Bihar
- Karnataka Text Book Society (R), Bengaluru, Karnataka



- Karyalya Collector Evam Zila Nirvachan, Harda, Madhya Pradesh
- Katyayini Paper Mills Private Limited, Kashipur, Uttarakhand
- Kazmi & Associates, Allahabad, Uttar Pradesh
- Kerala Paper Products Limited, Kottayam, Kerala
- Khadya Evam Upbhokta Sanrakshan Vibhag, Patna, Bihar
- Khanna Paper Mills Limited, Amritsar, Punjab
- Kirti Enterprises, Hathras, Uttar Pradesh
- Kuantam Paper Limited, Hoshiarpur, Punjab
- Kumarappa National Handmade Paper Institute, Jaipur, Rajasthan
- Ladhar Paper Mills, Jalandhar, Punjab
- LAMI Packaging (Kunshan) Corporation Limited, Yamunanagar, Haryana
- Lucknow Printers & Publishers, Lucknow, Uttar Pradesh
- M.L. Paper Convertor, Lucknow, Uttar Pradesh
- Madhya Pradesh Bhoj (Mukt) Vishwavidyalaya, Bhopal, Madhya Pradesh
- Madhya Pradesh Shram Kalyan Mandal, Bhopal, Madhya Pradesh
- Madhyamik Shiksha Board Rajasthan, Ajmer, Rajasthan
- Madhyamik Shiksha Mandal Madhya Pradesh, Bhopal, Madhya Pradesh
- Mahle Anand Filters Systems Private Limited, Gurugram, Haryana
- Makhanlal Chaturvedi National University of Journalism & Communication Bhopal, Madhya Pradesh
- Manipal Technologies Limited, Udupi, Karnataka
- Maruti Papers Limited, Shamli, Uttar Pradesh
- Maxim Speciality Chemicals Private Limited, Gautam Buddha Nagar, Uttar Pradesh
- Mehali Papers Private Limited, Dahej, Gujarat
- Mehamawaz Traders, Saharanpur, Uttar Pradesh
- Mitra Data Care, Jabalpur, Madhya Pradesh
- Mudran Mahal Printers & Publisher, Agra, Uttar Pradesh
- Mukhya Chikitsa Adhikari, Meerut, Uttar Pradesh
- Naini Papers Limited, Kashipur, Uttarakhand
- National Health Mission Haryana, Panchkula, Haryana
- National Printers, Ranchi, Jharkhand
- Nav Jyoti Press, Mathura, Uttar Pradesh
- New Ratan Priya, Patna, Bihar
- Nirmal Traders, Ghaziabad, Uttar Pradesh
- North Bihar Power Distribution Company Limited, Patna, Bihar
- Ordnance Factory Varangaon, Varangaon, Maharashtra
- Oyster Printers & Publishers Private Limited, Mathura, Uttar Pradesh
- P Square Solutions, Mathura, Uttar Pradesh
- P.A.R.K. Industries Private Limited, Karnal, Haryana

- Panchayati Raj Training Institute (PRIT), Lucknow, Uttar Pradesh
- Paper Fiber Impex, New Delhi
- Parijat Paper Mills Limited, Muzaffarnagar, Uttar Pradesh
- Paswara Papers Limited, Meerut, Uttar Pradesh
- Pathya Pustak Adhikari, Lucknow, Uttar Pradesh
- Pioneer Printers, Agra, Uttar Pradesh
- Pitambra Books Private Limited, Jhansi, Uttar Pradesh
- Pragati International, New Delhi
- Pratibha Pratishthan, New Delhi
- Pratibha Press & Multimedia Private Limited, Lucknow, Uttar Pradesh
- Printex India, Prayagraj, Uttar Pradesh
- Printing & Stationery Department, Chandigarh
- Product Promoters, Mysore, Karnataka
- Prolific Papers Private Limited, Kashipur, Uttarakhand
- PSB Paper Limited, Udham Singh Nagar, Uttarakhand
- Pt. Sunderlal Sharma Open University, Bilaspur, Chattisgarh
- Punjab National Bank, Noida, Uttar Pradesh
- Punjab Paper Mills Limited, Ludhiana, Punjab
- Punjab State Lotteries, Chandigarh
- R.K. Trading Company, Kasganj, Uttar Pradesh
- Raj Enterprises, Haldwani, Uttarakhand
- Rajasthan Eligibility Examination for Teacher, Ajmer, Rajasthan
- Rajeev Chemical Private Limited, Ghaziabad, Uttar Pradesh
- Rajeev Prakashan & Corporation, Prayagraj, Uttar Pradesh
- Rajvi Emerald, Gala Gymkhana Road, South Bhopal, Ahmedabad
- Rajya Kendriya Mudranalya, Jaipur, Rajasthan
- Rajya Pariyojna Nideshak, Lucknow, Uttar Pradesh
- Rakesh Papers Private Limited, Ghaziabad, Uttar Pradesh
- Ramesh Publishing House, Mathura, Uttar Pradesh
- Ramraja Printers & Publishers, Jhansi, Uttar Pradesh
- Rayana Paper Board Industries Limited, Sant Kabir Nagar, Uttar Pradesh
- Recoh EHS Services LLP, Vadodara, Gujarat
- RICO Auto Industries Limited, Gurugram, Haryana
- Ruchira Papers Limited, Sirmaur, Himachal Pradesh
- S.K. and Company, Budaun, Uttar Pradesh
- Sahil Trade Links, Chandigarh
- Sainsons Paper Industries Private Limited, Pehowa, Kurukshetra
- Samekit Bal Vikas Sewaye Nideshalya (ICDS), Patna, Bihar
- Sangal Papers Limited, Sardhana, Meerut, Uttar Pradesh

- Sanjay Publicity and Stationers, Kasganj, Uttar Pradesh
- SAR Technology, Jaipur, Rajasthan
- Satia Industries Limited, Muktsar, Punjab
- Security Printers of India Private Limited, Kanpur, Uttar Pradesh
- Security Printing Press, Hyderabad, Andhra Pradesh
- Seshasayee Paper and Boards Limited, Erode, Tamil Nadu
- Sheel Printers, Mathura, Uttar Pradesh
- Shiv Enterprises, Aligarh, Uttar Pradesh
- Shiva Handmade Papers, Haridwar, Uttarakhand
- Shree Kela Jee Books Private Limited, Agra, Uttar Pradesh
- Shree Sharda Press, Bhavnagar, Gujarat
- Shree Somnath Offset, Bhavnagar, Gujarat
- Shree Vallabh Plywood Private Limited, Yamunanagar, Haryana
- Shreyans Industries Limited, Ahmedgarh, Punjab
- Shri Prema Enterprises, Noida, Uttar Pradesh
- Shri Swaroop Enterprises, Noida, Uttar Pradesh
- Shsashtra Police Prashikshan Mahavidyalya, Sitapur, Uttar Pradesh
- Shubh International, Bengaluru, Karnataka
- Siddhomal Paper Conversion Corporation Private Limited, Ghaziabad, Uttar Pradesh
- Sidharth Papers Limited, Unit-II, Kashipur, Uttarakhand
- Silverton Papers Limited, Muzaffarnagar, Uttar Pradesh
- Silverton Pulp and Papers Private Limited, Muzaffarnagar, Uttar Pradesh
- Singhal Agencies, Lucknow, Uttar Pradesh
- Skylark Printers & Publishers Private Limited, Mathura, Uttar Pradesh
- Smarth International, New Delhi
- SMI Coated Products Private Limited, Thane, Maharashtra
- Sparkle Eco Innovations Private Limited, Surat, Gujarat
- Sparten Pulp Private Limited, Ahmedabad, Gujarat
- SS Enterprises, Dhar, Madhya Pradesh
- Star Paper Mills Limited, Saharanpur, Uttar Pradesh
- State Health Society Bihar, Patna, Bihar
- State Society of Ultra Poor and Social Welfare, Patna, Bihar
- Sterling Enterprises, Chandigarh
- Suchna Avam Jan Sampark Vibhag, Patna, Bihar
- Suchna Evam Jansampark Vibhag, Lucknow, Uttar Pradesh
- Suryansh Pulp & Board Private Limited, Kurukshetra, Haryana
- Swapna Printing Works Private Limited, Kolkata, West Bengal
- Swastik Hath Kagajam, Jalaun, Uttar Pradesh
- T.T.D. Press, Tirupati, Andhra Pradesh





- Terra Biomaterials, Bengaluru, Karnataka
- The Assam State Textbook Production & Publication Corporation Limited, Guwahati, Assam
- The General Company of Paper Industry, Egypt
- The Institute of Chartered Accountants of India, Noida, Uttar Pradesh
- The Sandesh Limited, Ahmedabad, Gujarat
- The Tribune Trust, Chandigarh
- The West Coast Paper Mills Limited, Dandeli, Karnataka
- The West Coast Paper Mills Limited, New Delhi
- Tirupati Stationery Private Limited, Kanpur, Uttar Pradesh
- Trident Limited, Ludhiana, Punjab
- Uma Paper & Allied Industries, Lucknow, Uttar Pradesh
- Unilever Industries Private Limited, Mumbai, Maharashtra
- University of Kashmir, Srinagar, Jammu and Kashmir
- Vacmet India Limited, Mathura, Uttar Pradesh
- Valmet Technologies Private Limited, Chennai, Tamil Nadu
- Vee Cee Computer Business Firms, Varanasi, Uttar Pradesh
- Veer Bahadur Singh Purvanchal Visvidyalaya, Jaunpur, Uttar Pradesh
- Veer Narmad South Gujarat University, Surat, Gujarat
- Vidya Vihar, New Delhi
- Visaka Industries Limited, Nalgonda District, Telangana
- Vishwa Pariwar, Raipur, Chhattisgarh
- Vishwanath Paper & Boards Limited, Kashipur, Udham Singh Nagar, Uttarakhand
- VLS Fibre, Chennai, Tamil Nadu
- Wacker Chemie India Private Limited, Mumbai, Maharashtra
- Wilson Printcity Private Limited, Ahmedabad, Gujarat
- Woman Development Corporation, Patna, Bihar
- Work Station Systems Private Limited, Bhopal, Madhya Pradesh
- Yash Pakka Limited, Ayodhya, Uttar Pradesh
- Yashi Industries Private Limited, Noida, Uttar Pradesh
- Yojna Avam Vikas Vibhag, Patna, Bihar
- Zume India Private Limited, Mumbai, Maharashtra

## MEETINGS

During the year 2021-2022 the following meetings has been organised and attended by CPPRI personnel.

### MEETINGS ORGANIZED

#### Meeting of the Research Advisory Committee

A meeting of the RAC of CPPRI was held virtually on August 24, 2021. The meeting was chaired by Ms. Manmeet K. Nanda, IAS, Joint Secretary, DPIIT, who was officiating with the additional charge of Joint Secretary (In-charge, Paper Sector). The meeting was held in an online mode.

The RAC discussed the proposed new activities by CPPRI which were to be submitted to the SFC for approval. In all, 8 activities were presented before the Committee out of which only 7 activities were approved for onward submission to the DPIIT for placing the proposal for approval of the SFC. After due evaluation by DPIIT followed by the SFC, the following was approved for execution by CPPRI as Project Based Support (PBS) Scheme during the period 2021-2026.

Name of Scheme/Activity	Rs. in lac					
	Year - 1	Year - 2	Year - 3	Year - 4	Year - 5	Total
<b>RAW MATERIAL AND PRODUCT DEVELOPMENT</b>						
Centre of Excellence for Multiplication of Quality Planting Stock of Selected Tree Species for Indian Pulp and Paper Industry.	353	284	293	232	151	<b>1313</b>
<b>ENERGY CONSERVATION AND ENVIRONMENTAL MANAGEMENT</b>						
Biopulping of lignocellulosic material to reduce chemical and energy demand in various pulping processes.	18	26.5	16.5	0	0	<b>61</b>
Setting up of the state-of-the-art chemical recovery laboratory	170	50	0	0	0	<b>220</b>
<b>INFRASTRUCTURE DEVELOPMENT AND CAPACITY BUILDING</b>						
Setting up of a pulp and paper mill based Bio-refinery laboratory	156	171	155	0	0	<b>482</b>

Setting Up of Waste Paper Recycling Promotion Centers (WPRPC)	88	148	133	138	0	<b>507</b>
<b>TOTAL</b>	<b>785</b>	<b>680</b>	<b>598</b>	<b>370</b>	<b>151</b>	<b>2583</b>

### **Meeting of the Development Council for Pulp, Paper and Allied Industries (DCPPAI) held on April 12, 2021**

The second meeting of Development Council for Pulp, Paper and Allied Industries (DCPPAI) was held under Chairmanship of Shri A.S Mehta, President JK Paper Ltd. on April 12, 2021 through Video Conference. Various issues related to Pulp & Paper Industry were taken up for discussion during the meeting.

### **Online Meeting of the Technical Subcommittee of Research Steering Committee of Development Council for Pulp, Paper & Allied Industries (RSC-DCPPAI) held on June 17, 2021**

An on-line meeting of the technical sub committee with Shri Anil Kumar, as Chairman, Shri R.C. Rastogi, MD Khatema Fibers & Shri R. Hebbar as members was held on June 17, 2021 to review the request of principal investigators of 3 RSC- DCPPAI Projects for extension in project duration without final implications.

### **Meeting of the Technical Subcommittee of Research Steering Committee of Development Council for Pulp, Paper & Allied Industries ( RSC-DCPPAI) held on December 1, 2021**

A meeting of the Technical Subcommittee of RSC-DCPPAI was convened at CPPRI on December 1, 2021 to review the progress of New & On going RSC-DCPPAI Projects. The meeting was attended by Shri Anil Kumar, CEO Shreyans Industries Ltd, & Chairman Technical Subcommittee, Shri R.C. Rastogi, MD Khatema Fibers Ltd ( who joined on-line) and Shri R. Hebbar, Head Development, JK Paper as well as the principal investigators of various on going and completed projects



Meeting of Technical sub-committee, December 1, 2021

### SALIENT MEETINGS ATTENDED

S. No.	Persons Involved	Organization	Place and Date
1	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	DPIIT & Meeting UNIDO	New Delhi from 07-4-21 to 08-4-21
2	Dr Nitin Endlay, (Scientist E-II)	BIS's Water Quality for Industrial Purposes Sectional Committee, CHD 13	19-4-2021
3	Dr. M.K. Gupta(Director), Dr Nitin Endlay (Scientist E-II) & Mr Mohd Salim (Scientist B)	Online meeting with Trident Paper Officials on Environmental Audit	31-05- 21.
4	Dr. M.K Gupta (Director), Dr Sanjay Tyagi(Scientist E-II), Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal), Shri A.K. Goel (Scientist E-I)	CHD 16 meeting	21-05-21
5	Dr. M.K Gupta (Director), Shri A.K. Goel (Scientist E-I)	CHD 15 meeting	1-06-21
6	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	DPIIT, Udyog Bhawan,	New Delhi from 24-6-21 to 26-6-21.
7	Dr M.K. Gupta (Director), Dr.S.Mishra & Dr.Nitin Endlay	An online meeting with UNIDO officials	5-7-21.

	(Scientist – E-II)	on Outcome of Pre-pilot trials at an Agro based Paper Mill on Membrane filtration,	
8	Shri Alok Kumar Goel (Scientist E-II)	Publication and Graphics Technology Sectional Committee of BIS	12-07-21
9	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	DPIIT, Udyog Bhawan, regarding roster for persons with disabilities.	15-7-21 to 17-7-21.
10	Shri Alok Kumar Goel (Scientist E-I) and Shri N.K. Naik, (ToE-I)	Meeting for GeM implementation (online mode)	04-08-21
11	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	DPIIT and JK Paper office, New Delhi	8-8-21 to 10-8-21.
12	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	DPIIT for submission of Documents related to Director Interview	New Delhi from 26-8-21 to 27-8-21
13	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	Yash Pakka and Suyash Paper Mill	29-9-21 to 5-10-21
14	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	DPIIT for Discussion on Pending Issue of CPPRI	17-10-21 to 9-10-21.
15	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	Meeting with consultant on administrative Issue at DPIIT	18-10-21 to 19-10-21
16	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	DPIIT, Udyog Bhawan	21-10-21 to 23-10-21.
17	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	CFTRI Mysuru attend meeting with Head Food Packaging Technology Division	25-10-21 to 30-10-21.
18	Shri Alok Goel, (Scientist E-I)	DOE -BEE Engagement on ISO 50001	27-10-21
19	Dr Nitin Endlay, (Scientist E-II)	Online meeting on BIS's 26 <sup>th</sup> Water Quality for Industrial Purposes Sectional Committee CHD 13,	27-10-21

20	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	Discussion on Utilization of ETP sludge through Biotechnological Route	15-11-21.
21	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	Meeting with ASFA, Udyag Bhawan, New Delhi in connection with PBS projects	16-11-21 to 17-11-21.
22	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	NIH Roorkee	7-12-21
23	Shri Satya Dev Negi, (Scientist E-I) and Mohd Salim, (Scientist-B)	B.R.Papers Pvt. Ltd., Jaspur Road, Katyayini Paper Mills Pvt. Limited, Fibermarx Papers Limited, Udham Singh Nagar, Uttarakhand	11.12.2021
24	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	Training of AAS, New Delhi	23-12-21 to 24-12-21.
25	Shri Satya Dev Negi, (Scientist E-I) and Dr. Arvind Sharma, (Scientist-B)	PSB Papers Pvt. Ltd., Bazpur, Rajlkshmi Paper & Boards (P) Ltd., Bazpur, Banwari Paper Mills Ltd., Kashipur, Multiwal Pulp & Board Mills (P) Ltd., Kashipur, Vishwakarma Paper & Boards Ltd. (Unit- 01 and 02), Kashipur, Distt. Udham Singh Nagar, Uttarakhand	31-12-2021.
26	Shri Satya Dev Negi, (Scientist E-I) and Dr. Nitin Kumar, Scientist-B	Khatema Fibers Limited, Khatima, Uttarakhand	13-01-22
27	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	CPCB, New Delhi	27-01-22.

28	Shri Satya Dev Negi, (Scientist E-I) and Dr. Shubhang Bhardwaj, (Scientist-B)	Genus Paper & Board Limited, Moradabad, Uttar Pradesh	28-01-22
29	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	To meet various paper mill associations	23-2-22 to 24-2-22.
30	Dr. M.K Gupta (Director), Ms. Anuradha Janbade (Scientist E-II), Ms. Priti S Lal(Scientist E-II)	WPRPC kick off meeting, IPMA office	19-02-22
31	Shri Satya Dev Negi, (Scientist E-I) and Sh. Akhil Naithani	Silverton Paper Ltd., Unit 1 and 2 Muzaffarnagar, Uttar Pradesh	03-03-22 to 04-03-22.
32	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	meeting with DPIIT and IPMA	6-3-22 to 8-3-22.
33	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	Delhi and Faridabad to participate in RSC DCPPIAI Training Programme	NCCBM Faridabad 10-3-22 to 11-3-22.
34	Dr. M.K Gupta (Director), Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal)) and S. Tyagi (Scientist E-II and Head, Paper Testing Div.)	Industry Academia meet on Future Road Map for Safe, Secure and Sustainable Food Packaging, organised by IIP	16-03-22.
35	Dr. M.K Gupta (Director) and Ms. Anuradha Janbade (Scientist E-II and Head Admin. (HR and Personal))	Meeting regarding UNIDO and IPPTA	23-3-22 to 27-3-22.
36	Dr Nitin Endlay (Scientist E-II)	15 Weekly On line Meetings organized by CPCB to evaluate the GPI Project Activities Progress.	Various Dates

## **CELEBRATION OF NATIONAL DAYS AND OTHER IMPORTANT DAYS AT CPPRI**

### **Independence Day**

CPPRI celebrated the Independence Day on August 15, 2021 with usual fanfare and gaiety. After the guard of honour from CPPRI Security Staff, Dr. M.K. Gupta, Director, CPPRI hoisted the National Flag followed by rendering of the National Anthem. Director, CPPRI addressed the staff and their family members, placing before the gathering the importance of the day and highlighted the activities and achievements of CPPRI and unveiled the future plans for growth of CPPRI.

### **Republic Day**

CPPRI celebrated the Republic Day on January 26, 2022 with sombre observance and participation from staff as well as their families. After the guard of honour from CPPRI Security Staff, the Director Dr. M. K. Gupta, unfurled the National Flag followed by rendering of the National Anthem. Director, CPPRI addressed the staff and their family members, reminisced the contribution of our national leaders in progress and development of our nation and highlighted the activities and achievements of CPPRI.

### **Vigilance Awareness Week**

The vigilance week in CPPRI was observed in a sombre manner this year, following the protocols put in place by the institute for COVID – 19 preventions. The theme of the week was Independent India @75 - Self reliance with Integrity.

The week was observed from 26/10/2021 to 1/11/2021.

The observance of the Vigilance Awareness Week commenced with taking of Integrity Pledge on 26<sup>th</sup> October at 1100 hrs. by the staff of CPPRI. Employees were also encouraged to taken e-pledge by visiting the Online Integrity Pledge web page [www.cvc.gov.in](http://www.cvc.gov.in).

Further, color posters disseminating information related to PIDPI (Public Interest Disclosure and Protection of Informer Resolution 2004) were placed at strategic places in the institute as well a the gates in both Hindi and English.

The orders for economy measures vide OM No. 7(2) E.Coord /2020 dated 04.09.2020 were followed in letter and spirit and every effort was made to limit the expenditure involved to bare minimum.

A Vigilance Gathering of Staff was also made during the week. Dr.Kawaljeet Singh, Sc F and CVO on the institute gave a presentation on matters related to Vigilance, with special focus on Complaints, Grievance and Incident reporting.



### **Awareness day for POSH act "Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act 2013**

On the initiative of the Ministry of Child and Women Development, the 8<sup>th</sup> anniversary of the Act, 9 December 2021 was observed as an awareness day on "Sexual Harassment of Women at Workplace" (Prevention, Prohibition and Redressal) Act 2013.

On this day, various events were organized at CPPRI including a poster competition on Women Empowerment and an Awareness lecture series on POSH Act.

The function was conducted by the administrative head of the institute, Dr. Sanjay Tyagi.

Dr. Priti S. Lal presented lecture on "POSH act on the occasion.

The function concluded with the viewing of posters on women empowerment and the vote of thanks by Dr. Sanjay Tyagi, Head paper testing division.



Glimpses of POSH Act Awareness program

### **International Women's Day**

International Women's day was observed at CPPRI on March 8, 2022. The special guest for the occasion was Mrs. Nina Dhingra, Social Worker and Member of CPPRI Internal Complaints Committee (ICC) set up as per provisions of PoSH Act. She gave a talk about Social, Economical, Cultural and Political achievement of women in past and present scenario. Dr. M. K. Gupta, Director, Dr. Priti S. Lal, Scientist E-II (Chairperson of committee-ICC), Dr. Nitin Endlay, Scientist E-II (Member of committee) and other Senior Scientists of CPPRI also presented their views on this occasion. The event was attended by senior scientist and all CPPRI staff members.



## महिलाओं को किया जागरूक



● जयपुरी संसदीय, सारनपुर  
सेक्टर में एक विश्व स्तरीय एनपी एवं  
बिना सीमा अनुसंधान संस्थान सारनपुर द्वारा  
अंतरराष्ट्रीय महिला दिवस का आयोजन  
किया गया। कार्यक्रम का मुख्य उद्देश्य सेवा  
द्विधा को महिला-निवेशन अधिकार-नीमा  
योग्य रही।  
श्रीमा सीमा ने महिलाओं को उनके  
अधिकारों की जानकारी दी एवं महिलाओं  
के जुड़े अनेक प्रकार के मुद्दों पर भी चर्चा  
की। मुख्य उद्देश्य के रूप में नीमा सीमा ने  
बच्चे का ध्यानपाद किया। कार्यक्रम में प्रतिष्ठित  
वैज्ञानिक डॉ प्रेमि सिन्हा ने लाल एवं डॉ  
कवलयीत सिंह ने अपने विचार रखे तथा  
संस्थान के महिला छात्र एवं कर्मचारियों  
को अति सुदृढ़ के लिए प्रेरित किया।  
कार्यक्रम का संवादन युवा वैज्ञानिक कुमार  
अनुपम द्वारा किया गया। कार्यक्रम में  
डी.आर.ए.ए. मुंडन, अरुणी, अतिथि-व्यंजना  
ने सक्रिय भाग लिया। कार्यक्रम में डॉ एके  
दीक्षा, डॉ संजय शर्मा, अज्ञातक फौजल  
आदि उपस्थित रहे।

## Other Events

### 41st Foundation day of CPPRI

The Foundation Day of the Institute falls on 11<sup>th</sup> of November every year. The day is observed in a festive as well as a reflective mood, as the institute realigns its activities to the ever changing scenario in the pulp and paper sector in the country.

This year, the occasion was graced by leading personalities from the Industry and the Academia. Amongst the guests were Shri Anil Kumar, ED, Shreyans Industries, Punjab, Dr Ashok Kumar, Executive Director, Pudumjee Paper Products Ltd. And Prof (Dr.) Y.S Negi, Dean, Indian Institute of Technology, (Roorkee), Saharanpur Campus.

The occasion was also graced by the presence of former Directors as well as employees of the Institute.



Celebration of 41<sup>st</sup> Foundation day of CPPRI

### Celebration of Vishwakarma puja at CPPRI Saharanpur:

Vishwakarma puja was performed on occasion of Vishwakarma diwas by Engineering and Maintenance Division of CPPRI Saharanpur on 17th September, 2021 at workshop of Engineering and Maintenance Division.

The day is observed to showcase the importance of engineering in nation building, whereby the blessings of the Divine Architect and Engineer, Bhagwan Vishwakarma are evoked by the performance of puja.



Glimpses of Vishwakarma Puja

### Saraswati Pooja

Saraswati Puja is performed for devotion to the Goddess of knowledge and wisdom. The Goddess of learning is worshiped among the students and scholars alike. The festivities that go along with Saraswati pooja is in part a social celebration.

On this day, it is traditional to wear yellow clothes. Bright Palash flowers are offered as Pushpanjali along with chanting mantras which is a significant part of the worship.

The event, coincides with the Basant Panchami, believed to be the birth day of the Goddess of knowledge and wisdom, Saraswati. It was attended by CPPRI staff in full strength with prayers and festivities.



Celebration of Saraswati Pooja

## **WORKSHOPS AND TRAINING PROGRAMS ORGANIZED**

### **Training Programs Organized**

- One Day Online Interaction Meet was organized by Environmental Management Division on "**Legislation and Compliance for Management of Air Pollution in Pulp and Paper Industry**" on **June 05, 2021** to commemorate **World Environment Day**. The faculty included distinguished speakers namely Shri Niranjan Baghchi, Ex Advisor, MoEF&CC, Shri J.S.Kamyotra, Environmental Expert & Ex Member Secretary CPCB, Dr Mukesh Sharma, IIT Kanpur, Dr Ashok Sharma, Consultant & Ex Member Secretary HSPCB, Dr Vivek Kumar, IIT Delhi & Dr S.K. Goyal, NEERI. The Chief Guest of the Interaction Meet was Shri Anil Agrawal, Joint secretary DPIIT, & Guest of Honour was Shri A.S Mehta, President JK Paper Ltd. Over 60 officials from various paper mills, institutes and other allied industries participated in the interaction meet.
- RSC-DCPPAI Training Programme on "**Emerging Issues in Recycled Fiber (RCF) Based Paper Mills in India**", Organized at Central Pulp & Paper Research Institute, Saharanpur on **August 14, 2021**, which was attended by 24 persons (students/academia/industry).
- Training Programme on "**Efficient Operations of Chemical Recovery & Environmental Management Systems in Indian Pulp & Paper Mills**" at NITTTR, Chandigarh **September 17-18, 2021** organized by Central Pulp and Paper Research Institute, Saharanpur, which attracted a diverse mix of stakeholders.
- RSC-DCPPAI training program on "**Application of Paper and Paper-Board in Packaging of Food Items**" from **November 11-12, 2021** organized at Central Pulp and Paper Research Institute, Saharanpur, in which 48 students/academia/industry persons have taken active participation.
- RSC-DCPPAI training program on "**Relevance Of Energy & Environment Audits In Indian Paper Industry**" at NITTTR, Chandigarh on **December 17-18, 2021**
- RSC-DCPPAI Training Program "**Application of Advance Bleaching Sequences in Indian Pulp & Paper Industry**" at NCCBM, Ballabgarh, Faridabad, Haryana on **March 11-12, 2022** organized by Central Pulp and Paper Research Institute, Saharanpur, with active stakeholder participation.



## Training Imparted

- Project dissertation works for many graduate and post-graduate students from Glocal university, Saharanpur (UP); Graphic era Uni., Dehradun, (UK); Gurukul Kangdi, Haridwar, (UK) were completed in the area of “Biotechnology and its application in Pulp and Paper Industry”.
- Training CTP-1, 9 and 15 was imparted in various areas by the PCPB Division.
- Training on CTMP of Rice Straw was imparted by PCPB Division to B. Nawaz, Aamir Hamza Enterprises, Hubli Karnataka.
- Training of two persons from Fuma Labs, Pune, was carried out for the course CTP in the field of pulping & bleaching.
- Online course on “**Pre Pilot Scale Studies of Agro Based Raw Material**” on **July 2, 2021** was hosted by Central Pulp & Paper Research Institute, Saharanpur.

## **PARTICIPATION IN WORKSHOPS/ SEMINARS AND TRAINING PROGRAMS**

- One day training program on **“Awareness Training On IS/ISO 9001:2015 Requirement & Risk-Based Thinking”**, April 4, 2021 at CPPRI, Saharanpur attended by Dr. Nitin Kumar and Dr. Jitender Dhiman
- Online course on **“Legislation & Compliance for Management of Air Pollution In Pulp And Paper Industry”** May 5, 2021 was hosted by Central Pulp & Paper Research Institute, Saharanpur.
- Online training **“Understanding & Implementing ISO/IEC 17025: 2017 including Management System Documentation & Internal Auditing, May 11- 14, 2021 ”**- attended by Mrs. Anuradha V Janbade and Shri Satya Dev Negi conducted by NITTR, Chandigarh.
- Online training programme on **“Prevention of Sexual Harassment of Women at Work Place”**, July 19-20, 2021 attended by Dr. Priti Shivhare Lal and Smt. Sarita Sharma organized by ISTM, New Delhi.
- **2nd International Conference on Chemical, Bio & Environmental Engineering (CHEMBIOEN-2021), August 20-21, 2021** held on virtual mode at Department of Chemical Engineering, Dr B R Ambedkar National Institute of Technology, Jalandhar, Punjab (INDIA) attended by a team of CPPRI personnel.
- International conference on **“Innovative Technologies for Clean and Sustainable Development”** October 14-15, 2021, Chitkara University, Chandigarh, attended by a team of CPPRI personnel.
- Online training for instrument AAS (Atomic Absorption spectrometer December 23-25, 2021 - attended by Mrs. Anuradha V Janbade and Dr. Jitender Dhiman conducted by **“Analyticaljena”** at New Delhi
- Team of scientists from CPPRI attended a webinar on **“Paper recycling”** February 11, 2022 by Bureau of Indian standards.
- Team of scientists from CPPRI attended a 01-day workshop on **“WPRPC and Waste Paper Recycling”** on February 22, 2022 sponsored by Japan Paper Association.
- **56<sup>th</sup> Annual Seminar on “Best practices in the field of Manufacturing Environment, HR Image Building and Branding by Pulp Paper Industry”**, New Delhi on March 25-26, 2022 attended by Dr Priti Shivhare Lal and Mrs Anuradha Vipul Janbade organized by IPPTA, Saharanpur.

## **PAPERS PRESENTED AND LECTURE DELIVERED**

During the year 2021-2022, CPPRI Scientists presented the following papers in seminar and workshops

**2<sup>nd</sup> online International Conference on Chemical, Bio and Environmental Engineering, Department of Chemical Engineering Dr B R Ambedkar National Institute of Technology, Jalandhar Punjab on 20-22 August, 2021.**

- Environmental impact of Application of Ozone bleaching production of pulp from Agro based fibrous materials - An innovative approach - Dr. Arvind Sharma
- Application of Biotechnology in Pulp and Paper Industry – Dr. Nitin Kumar
- Water Conservation Strategies & Opportunities for Sustainability of Pulp & Paper Sector - Dr Nitin Endlay

**National Environmental Engineering Research Institute (NEERI), New Delhi on September 6, 2021**

- Overview & Issues of Indian Pulp & Paper Industry – Dr M.K. Gupta
- About Paper – Importance , Myths & Reality – Dr Nitin Endlay

**Training Programme on Efficient Operations of Chemical Recovery & Environmental Management Systems in Indian Pulp & Paper Mills NITTTR, Chandigarh September 17-18, 2021**

- Recent Trends / Strategies for Improved Environmental Management in Pulp & Paper Mills - Dr Nitin Endlay

**International Conference on “Innovative Technologies for Clean and Sustainable Development - 2021 Chitkara University, Himachal Pradesh and NITTTR, Chandigarh on October 14-15, 2021**

- Current Advancement in Application of Bacterial Cellulose in Pulp and Paper Industry - Ms. Anuradha Janbade

**Two-Day RSC-DCPPAI training program on Application of Paper and Paper-Board in Packaging of Food Items Central Pulp and Paper Research Institute, Saharanpur on November 11-12,2021**





- Bacterial Cellulose for Enhancing Barrier Properties of Food Grade Papers and Paper Boards- Ms. Anuradha Janbade
- Current status of commercially available food packaging papers with respect to FSSAI norms- Ms. Anuradha Janbade

#### **Andhra Paper Limited (Unit Kadiyam)**

- Overview of Indian Pulp & Paper Industry & Recent Trends / Strategies for Improved Environmental Management in Pulp & Paper Mills - Dr Nitin Endlay

#### **Online Sensitization Workshop Organised by CPPRI for Participating Institutes in CPCB sponsored Project Monitoring of Grossly Polluting Industries CPPRI, Saharanpur on January 17, 2021**

- About Indian Pulp & Paper Industry - Dr Nitin Endlay
- Water Conservation Strategies & Opportunities for Sustainability of Pulp& Paper Sector – An Overview of Recent Trends- Dr Nitin Endlay
- “GPI Project 2021-22” - Inspection of Grossly Polluting Industries (GPIs) by Technical Institutes In Main Stem States of River Ganga & Yamuna- Dr Nitin Endlay
- About Central Pulp & Paper Research Institute (CPPRI) & Environmental Management Division - Dr Nitin Endlay

#### **Expert Consultation on Sustainable Public Procurement: Writing and Printing Paper on February 15, 2021**

- Water Conservation & Environmental Sustainability of Indian Paper Mills - Dr Nitin Endlay

#### **Seminar on WPRPS project setting up of waste paper recycling promotion centre during AOTS -MAITY Japan and CPPRI, Delhi on February 22, 2022**

- Setting up of waste paper recycling promotion center - Dr.Priti S Lal

#### **Two-Day RSC-DCPPAI Training Program on Application of Advance Bleaching Sequences in Indian Pulp & Paper Industry NCCBM, Ballabgarh, Faridabad, Haryana on March 11-12, 2022**

- Short Sequence Bleaching of Indigenous Raw Materials Pulp - Dr.Priti S Lal
- Biobleaching an environment friendly approach - Ms. Anuradha Janbade



**IPPTA 56<sup>th</sup> Annual Seminar on Best practices in the field of Manufacturing Environment, HR Image Building and Branding by Pulp Paper Industry, New Delhi on March 25 - 26, 2022**

- A New Horizon of Utilization of Bamboo for Production of food packaging Pulp, Paper and Board- Dr.Priti S Lal
- Addressing Safety Concerns for producing high quality food packaging papers- Ms. Anuradha Janbade (Second Runner Up Reward- Best Paper)

## **REPRESENTATION IN EXTERNAL COMMITTEES**

### **Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India**

- Member, Environment Appraisal Committee (EAC) Industry –I of Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India - Dr. M.K. Gupta

### **Development Council for Pulp, Paper and Allied Industries**

- Member-Secretary, Development Council for Pulp, Paper and Allied Industries - Dr. M.K. Gupta

### **Research Steering Committee of Development Council for Pulp, Paper and Allied Industries**

- Member-Secretary, Research Steering Committee of Development Council for Pulp, Paper and Allied Industries (Formerly Cess Committee) Dr. M.K. Gupta

### **Bureau of Indian Standards (BIS), New Delhi**

- Chairman, BIS, CHD Paper and Board Sectional Committee, CHD - 15 Dr. Manoj Kumar Gupta
- Convenor, Alert Panel, BIS Paper and Products Sectional Committee, CHD – 15 Dr. M.K. Gupta and Dr. Sanjay Tyagi
- Technical Member, BIS Paper and Products Sectional Committee, CHD – 15 – Dr. Sanjay Tyagi, and Sh. Alok Kumar Goel
- Member, BIS Sectional Committee, Paper Board and its Product, CHD 16- Dr. Sanjay Tyagi
- Member of various panels constituted under CHD 15 and CHD 16 sectional committees of BIS – Dr. Sanjay Tyagi
- Member, Publication and Graphic Technology Sectional Committee, MSD 06 – Dr. Sanjay Tyagi
- Principal Member of Bureau of Indian Standards (BIS) Committee: Water Quality for Industrial Purposes Sectional Committee (CHD-13) – Dr. Nitin Endlay
- Chairman Alert Panel of BIS CHD 13:P2 Water Treatment Chemicals of Water Quality for Industrial Purposes – Dr Nitin Endlay



#### **NEPA Paper Mills Limited, Nepanagar (Madhya Pradesh)**

- Member of Technical Committee for monitoring the progress of Revival and Mill Development plan (RMDP) of Nepa Limited – Dr. Manoj Kumar Gupta and Dr. Sanjay Tyagi

#### **National Council for Cement and Building Materials, Ballabgarh, Haryana**

- Member of Fact Finding Committee at NCCBM, Ballabgarh – Dr. A.K. Dixit
- Chairman of SSC meeting at NCCBM, Ballabgarh – Dr. A.K. Dixit

#### **Satia Industries Limited**

- Independent Director in Board of Directors of Satia Industries Limited-Dr. Priti S. Lal

#### **Others**

- Life Member of Indian Association for Air Pollution Control , New Delhi – Dr. M.K. Gupta, Dr. Kawaljeet Singh & Dr Nitin Endlay
- Life Member of Indian Pulp & Paper Technical Association ( IPPTA) – Dr. M.K. Gupta & Dr Nitin Endlay
- Life Member of Society of Tropical Agriculture , New Delhi – Dr. M.K. Gupta & Dr Nitin Endlay
- Member Screening Committee of the Biotechnology Incubation Center , Himachal Pradesh University (BIC-HPU) – Dr Nitin Endlay
- Expert Member of the Committee of Board of Studies for M.Sc (Environmental Management Course) of FRI ( Deemed to be University) – Dr Nitin Endlay

## PUBLICATIONS

### Publications

- Singh, Akansha; Shobhit Kumar; Sharma, Arvind; Negi, Satya Dev and Lal, Priti Shivhare (2021). **Study on effect of pulping conditions & bleaching sequences on wheat straw pulp properties**, Inpaper International, Vol. 23 (4), 14-21.
- Dhiman, Gunjan; Sharma, Arvind; Lal, Priti Shivhare; Sharma, Deepak and Thapliyal, Bipin. Prakash. **Bleaching of bagasse-pulp using short TCF and ECF sequence** (2021). Nordic Pulp and Paper Research Journal, Vol 36(3), 414-424.
- Dhiman, Gunjan; Lal, Priti Shivhare; Sharma, Arvind; Sharma, Deepak; Saini, Aarti and Gupta, Manoj Kumar (2021). **A New Horizon of Utilization of Bamboo for Production of food packaging Pulp, Paper and Board**, IPPTA ,33 (3), 25-28.
- Endlay, Nitin; Sharma, D. K; Singh, Y. V; Sarvender Kumar; Rosin, K. G; Jitendra Rajput; Dwivedi, Neeta; Sharma, Anil Kumar & Gupta, Manoj Kumar (2021) **Perspective of Land Application of Treated Effluent in Pulp & Paper Industry. International Journal of Tropical Agriculture** , 39 (4), 319-328.
- Endlay, Nitin and Gupta, Manoj Kumar (2021). **About Paper-Importance & Environmental Implications**, IPPTA, Vol 33(2), 41-44.
- Janbade, Anuradha Vipul; Dhiman, Jitender; Zaidi, Sehar; Gupta Manoj Kumar (2021). **Addressing Safety Concerns for producing high quality food packaging papers**, IPPTA, 33 (3), 29-33.
- Sharma, Arvind; Dhiman, Gunjan; Lal, Priti Shivhare; Godiyal, Ravi Dutt and Thapliyal, Bipin Prakash. **Characterization and Evaluation of Moringa Oleifera (Drum Stick Family) Wood for Pulp and Paper Making Potential.**(2021). Cellulose Chemistry and Technology. Vol 55 (3-4), 252-262.
- Sharma, Nidhi; Godiyal, Ravi Dutt; Bhawana; Thapliyal, Bipin Prakash and Kumar Anupam (2022). **Insight into papermaking characteristics of D<sub>0</sub>E<sub>P</sub>D<sub>1</sub>-bleached soda, soda-AQ and kraft pulps of citronella grass (Cymbopogon winterianus Jowitt).** **Biomass Conversion and Biorefinery**, 12, 427-440.
- Tyagi, Abhishek; Mohd. Salim; Mishra, Shivakar; Endlay, Nitin; Gupta, Manoj Kumar and Thapliyal, Bipin Prakash (2021). **Water Recycling in Pulp & Paper Mill Processes**. IPPTA. Vol 33 (2), 33-40.

## REPORTS PREPARED

During the year 2021-2022 various reports were prepared. Details are as under

### Food Grade Paper Testing and Biotechnology Division

- Project Report on “Creation of Testing Facilities for Food Packaging Paper and Board and Development of Testing Protocol for Microbial Property” submitted to RSC-DCPPAI.
- Two Paper samples received from KPPL, Kerala on 04-03-2022 for Microbial Load test. Report has been made and submitted.

### Pulping and Bleaching

- Mechanical Pulping and Bleaching of Jute Caddy for Sparkle Eco Innovations Private Limited, Gujarat
- Evaluation of Sisal Fibre for Innovate Pulp and Paper, Noida
- CTMP Pulping of Rice Straw for Fuma lab Pvt Ltd,
- SCP Pulping of Subabul to Produce Semichemical Pulp for Mehali Papers Private Limited Paper Board Division, Gujrat
- TCF Bleaching of Bagasse Pulp for Yash Pakka, Faizabad
- Utilization of Areca Nuts Fibrous Waste for Production of Various Grades of Pulp for Terra Biomaterials, Bangaluru
- Pulping Optimization Followed by Bleaching Optimization of Hardwood And Softwood for Agro Pulping Pvt Ltd, Chennai
- NSSC Pulping of Subabul to Produce Semichemical Pulp, Consultancy for Mehali Papers Private Limited Paper Board Division, Gujrat
- Pulping of Hardwood Samples for Satia Industries Limited Muktsar- Malout Road PO. Vill- Rupana - Punjab
- Optimization of CTMP Process of Rice Straw for its Utilization in Production of Moulded Fibre Product for Fibranium Manufacturing Pvt. Ltd., Govinda Vadi Village, Kanchipuram

### Environmental Management

- Environmental Audit of Trident Ltd , Barnala, Punjab
- Report on Mass Balance and Water Balance at Bindals Papers Mills Ltd, Muzaffarnagar, U.P.



- Report on Impact on Pollution Load Generation due to Change in Fibrous Raw Material Furnish at Bindals Papers Mills Ltd , Muzaffarnagar , U.P.
- Adequacy Assessment & Performance Evaluation of Existing Effluent Treatment Plant at Andhra Paper Ltd ( Unit : Kadiyam)
- Adequacy Assessment of Existing Effluent Treatment Plant at Star Paper Mills Ltd., Saharanpur
- Feasibility of Zero Liquid Discharge in Punjab Paper Mill
- Performance Evaluation & ETP Adequacy assessment of ETP at Sainsons Papers Industries Ltd., Pehwa, Kurukshetra
- Adequacy of Existing and Proposed Effluent Treatment Plant (ETP) For Treatment of Effluent to be Generated from Proposed Capacity Expansion (Unit-I) of 240 TPD Kraft Paper from 180 TPD Agro Residues and 60 TPD Existing Waste Paper at Silverton Papers Limited, Muzaffarnagar
- Adequacy of Existing Effluent Treatment Plant (ETP) for Treatment of Effluent to be Generated from Proposed Capacity Expansion (Machine-Ii) of 150 TPD Kraft Paper From Agro Residues and Existing Waste Paper Machine-I (250 TPD), at Disha Industries Pvt. Limited, Muzaffarnagar , U.P.
- Water Audit of Yashpakka Ltd, Faizabad, U.P.
- Adequacy of Existing Effluent Treatment Plant (ETP ) for Treatment of Effluent to be Generated from Proposed Capacity Expansion of 200 TPD Media Kraft Paper from 100 % Waste Paper at Suyash Paper Mills, Basti (U.P.)
- Adequacy of Existing Waste Water Treatment Plant (WWTP) for Treatment of Waste Water Generated from Slaughtering of 150 Buffalo Animals/Day
- Verification of Zero Liquid Discharge (ZLD) Status and Adequacy Assessment of Back Water Treatment System for Proposed Capacity Expansion from 300 TPD to 600 TPD Kraft Paper Production, Maruti Papers Limited, Shamli, (U.P.)
- Feasibility of Zero Liquid Discharge (ZLD) at Dhanlaxmi Agro Mill (India) Private Limited, Bazpur, Udham Singh Nagar, Uttarakhand.
- GPI Inspection Reports of 126 units were prepared by the EMD Division in the year 2021-2022.

### **Statistical Cell / Waste Paper Recycling Promotion Centre (WPRPC)**

- **Data base supports provided to METI & AOTS**
- Core Secretariat provided all possible support to Ministry of Economic, Trade & Industry – Japan (METI) & Japan Paper Association, for successful completion of their waste paper recycling program. A complete study in the form of a booklet (“The Supply Chains Prevalent in the Trade of Waste Paper in India”) provided to METI & AOTS for better understanding of Indian Paper Industry.



- **Studies conducted and submitted to DPIIT.**

- Reply/Comments Export Ban of Non-Hazardous Waste from European Union of Indian (Ref. EU Commission Regulation (EU)2021/1840)
- Major guideline and dataset shared with DPIIT regarding Import Monitoring System (paper)
- Comments on Cheaper imports making indigenous waste paper less competitive (issue raised by ASSOCHAM)
- Comments offered on request to reduce the cost of art paper used as raw material in printing presses as well as start a “Print Park” like the IT park, regarding
- Inputs provided for Federation of Corrugated Boxes & Manufacturer’s concerns
- Pre & Post Covid Study conducted and concluded remarks submitted to DPIIT.
- Core inputs provided to DPIIT regarding DMP (Disaster Management Plan).
- Major guideline and dataset shared with DPIIT regarding Import Monitoring System (paper)
- India @ 2047 visioning process (Paper, Cement and LR Sector).



## VISIT TO PAPER MILLS AND OTHER ORGANIZATIONS

Name	Organization visited	Date
Mohd. Salim, Scientist B, Mr. Amitabh Raj Tripathi, SRF, Mr. Yogesh Jangam, JRF	Trident Ltd. (CPD) in Barnala, Punjab	07.04.2021
Dr. A.K. Dixit, Scientist F	UNIDO in New Delhi	08.04.2021
Mr. Alok Kumar Goel, Scientist E-II, Mr. N.K Naik, T.O. E-I	CPWD in Dehradun	09.04.2021
Dr. A.K. Dixit, Scientist F	IARPMA in New Delhi	16.04.2021
Dr M.K . Gupta, Director & Dr Nitin Endlay, Scientist E-II	Shreyans Industries Ltd, Ahmedgarh, Punjab	7.6. 2021
Dr M.K . Gupta, Director & Dr Nitin Endlay, Scientist E-II	CISCO, Chandigarh	7.6. 2021
Dr. Nitin Endlay, Scientist E-II	WTC, DPIIT, NEERI, CPCB & to meet Dr. S.K. Solanki, Environmental Consultant in New Delhi.	08.06.2021- 12.06.2021
Dr. M.K Gupta, Director and Dr Jitender Dhiman, Scientist-B	Chandpur Enterprises Ltd., Bijnore	08-06-21
Dr. A.K. Dixit, Scientist F, Dr. Nitin Endlay, Scientist E-II	NITTTR Chandigarh, CSIO Chandigarh, Shreyans Industries Ltd., Ahmedgarh (Punjab)	16.06.2021 to 17.06.2021
Dr. M.K. Gupta, Director, Dr. A.K. Dixit, Scientist F & Dr. Nitin Endlay, Scientist E-II	Sainsons Paper Industries Ltd. Pehowa (Haryana)	19.06.2021
Mr. Alok Kumar Goel, Scientist E-II	UPNEDA in Lucknow	20.06.2021 to 22.06.2021
Anuradha V. Janbade, Scientist E-II	DPIIT in New Delhi	24.06.2021
Dr. A.K. Dixit, Scientist F	J.K. Papers Limited, New Delhi	28.06.2021
Mr. Akhil Naithani "Admin. Exe." & Mohan Singh Pal "Executive Assistant	UPNEDA & PWD Office, Near Raj Bhavan, in Lucknow	01.07.2021 to 07.07.2021
Dr. M.K Gupta, Director, Ms. Anuradha Janbade, Scientist E-II and Dr. Nitin Kumar, Scientist B	NIH, Roorkee	02-07-2021
Dr. A.K. Dixit, Scientist F	IARI, NEERI, and CPCB in	08.07.2021

	New Delhi	to 09.07.2021
Dr M.K . Gupta, Director & Dr Nitin Endlay, Scientist E-II	NEERI , IARI, CPCB, New Delhi	8.7 . 2021
Anuradha V. Janbade, Scientist E-II	DPIIT in New Delhi	15.07.2021
Dr. A.K. Dixit, Scientist F	Bindal Paper Limited & Silverton Paper Ltd. in Muzaffarnagar	15.07.2021
Dr. M.K. Gupta, Director & Dr. Nitin Endlay, Scientist E-II	PPCB in Patiala, PPCB Regional office in Sangrur, Trident Ltd (PCD) in Barnala, Satia Industries Ltd. (SIL) in Muktsar	19.07.2021 to 20.07.2021
Dr. Shivaker Mishra Scientist E-II & Mr. Amitabh Raj Tripathi, SRF	Yash Pakka Ltd. in Ayodhya	21.07.2021 to 25.07.2021
Dr. A.K. Dixit, Scientist F	NCCBM in Ballabgarh & CPPRI Base office in New Delhi	22.07.2021 to 23.07.2021
Dr. Shivaker Mishra Scientist E-II	Krishnanchal Paper Mills Limited & Tirupati Balaji Paper Mills Limited in Muzaffarnagar	31.07.2021
Dr. M.K. Gupta, Director, Dr. Nitin Endlay, Scientist E-II	WTC, DPIIT in New Delhi	03.08.2021 to 05.08.2021
Alok Goel, Scientist E-II, Shri N.K Naik, ToE-I, and Dr. Nitin Kumar, Scientist-B	CPWD office Dehradun	05-08-2021
Dr. Nitin Endlay, Scientist E-II,	DPIIT, WTC, Indian Agro & Recycled Papers Mills, CPCB & Enviroway in New Delhi & Gurugram	18.08.2021 to 20.08.2021
Mr. Alok Kumar Goel, Scientist E-II	Energy Efficiency Services Ltd. in New Delhi	23.08.2021 to 24.08.2021
Dr. Shivaker Mishra, Scientist E-II	M/s Deoria Papers Mills Limited in Deoria. (UP)	22.08.2021 to 25.08.2021
Mr. Akhil Naithani, Admin. Exe	AGM Technical, EESL in New Delhi	23.08.2021 to 24.08.2021

Dr. A.K. Dixit, Scientist F,	CPCB / DPIIT in New Delhi	27.08.2021
Mr. Alok Kumar Goel, Scientist E-II	Senior Project Officer, Incharge UPASDA, and UPNEDA in Lucknow	02.09.2021 to 04.09.2021
Dr. A.K. Dixit, Scientist F	NITTTR in Chandigarh	07.09.2021 to 08.09.2021
Mohd. Salim , Scientist B	Punjab Pollution Control Board, Patiala & Sainsons Papers Pvt. Ltd., Pehowa (Haryana)	09.09.2021
Mr. Alok Kumar Goel, Scientist E-II	Controlling Printing & Stationery Department in Panchkula, Haryana	10.09.2021
Dr. Shivaker Mishra, Scientist E-II Mohd. Salim, Sc.B	National Institute Of Technical Teacher Training & Research (NITTTR) in Chandigarh	16.09.2021 to 19.09.2021
Dr. Shivaker Mishra, Scientist E-II	DSG Papers Private Limited Patiala, Punjab	22.09.2021
Dr. M.K Gupta, Director, Ms. Anuradha Janbade, Scientist E-II	Yash Pakka and Suyash Paper Mill	29.9.2021  1.10.2021 to 5.10.2021
Dr. Shivaker Mishra Scientist E-II	Devria Papers Mills in Devria (U.P)	20.10.2021 to 23.10.2021
Ms. Anuradha V. Janbade Scientist E-II	DPIIT in New Delhi	21.10.2021 to 22.10.2021
Mr. Kumar Anupam, Scientist B, Dr. A.K. Dixit, Scientist F.	CPCB in New Delhi	22.10.2021 22.10.2021
Ms. Anuradha V. Janbade, Scientist E- II	CFTRI, BNPN in Mysuru	27.10.2021 to 28.10.2021
Mr. Kumar Anupam, Scientist B	FRI in Dehradun	03.11.2021
Ms. Anuradha V. Janbade, Scientist E- II	Haryana Pollution Control Board & NITTR CSIO Chandigarh	15.11.2021
Mr. Amitabh Raj Tripathi, SRF Mohd. Salim, Scientist B,	Envirotech Instrument Pvt. Ltd. And Industrial area , ICAR -	16.11.2021 to

Dr. Nitin Endlay Scientist E-II	Envirotech Instrument Pvt. Ltd., IPMA in New Delhi	17.11.2021
Dr Nitin Endlay , Scientist E-II, Mr Mohd Salim, Scientist B and Mr Abhishek Tyagi	Andhra Paper Ltd , Kadiyam	22.11.2021 to 28.11. 2021
Mr. Akhil Naithani, Admin. Exe. & Mr. Akshay Dhiman, Admin. Exe.	UPNEDA, EESL in Lucknow & Jal Nigam's 4 pumping sites in district of Unnao (U.P.)	22.11.2021 to 26.11.2021
Dr. Nitin Endlay Scientist E-II	Indian Agriculture Institute in New Delhi	23.11.2021 to 24.11.2021
डॉ एम के गुप्ता निदेशक, डॉ नितिन एंडले, वैज्ञानिक ई -II	भेल, राजभाषा विभाग, नई दिल्ली	2.12.2021
Dr. A.K. Dixit, Scientist F	Silverton paper limited in Muzaffarnagar	04.12.2021
Dr. A.K. Dixit, Scientist F and Mohd. Salim Scientist B	Trident Ltd Barnala, Punjab	05.12.21 to 06.12.21
Dr. A.K. Dixit, Scientist F	NITTTR in Chandigarh	09.12.21
Mohd. Salim, Scientist C Dr. Satya Dev Negi, Scientist E-I	Sahota Papers Pvt. Ltd. , Devrishi Papers Pvt. Ltd. and Fibermarks Paper Pvt. Ltd., Vishavnath Paper and Board Ltd. in Jaspur and Katyamini Papers Mill Ltd. , B.R Papers Pvt. Ltd. in Kashipur Uttarakhand Pollution Control Board (UEPPCB) in Kashipur	10.12.2021 to 12.12.2021
Mr. Kumar Anupam, Scientist B Dr. Nitin Endlay, Scientist E-II Dr. Shivaker, Mishra Scientist E-II	Department of Official Language Ministry of Industry in New Delhi Department of Official Language Ministry of Commerce and Industry in New Delhi Sidhart Paper Ltd, Sidhart Paper Ltd(Unit-2), Siddheshwari Udyog Ltd., Bahl Papers Mill Ltd. in Kashipur	13.12.2021 to 14.12.2021
Dr. A.K. Dixit, Scientist F, Mr. N.K Naik T.O. E-I, Mr. Akhil Naithani "Admin. Exe."	NITTTR in Chandigarh	16.12.21 to 19.12.21

Mohd. Salim, Scientist B		
Dr. Nitin Endlay Scientist E-II	National Research Institute of Technical Education and Training in Chandigarh	18.12.21
डॉ एम के गुप्ता, निदेशक, डॉ नितिन एंडले, वैज्ञानिक ई -II और श्री कुमार अनुपम, वैज्ञानिक बी	हिंदी राजभाषा विभाग, डीपीआईआईटी	20.12.2021
डॉ एम के गुप्ता, निदेशक, डॉ नितिन एंडले, वैज्ञानिक ई -II और श्री कुमार अनुपम, वैज्ञानिक बी	राजभाषा समीक्षा बैठक, होटल अशोक नई दिल्ली	27.12.2021
Mr. Kumar Anupam Scientist B	Department of Official Language Ministry of Industry in New Delhi	20.12.2021 to 21.12.2021
Dr. Nitin Endlay, Scientist E-II, Mohd. Salim Scientist B	Department of Official Language Ministry of Commerce and Industry in New Delhi Naini Tissues Ltd., Kashipur, Naini Papers Ltd, Kashipur and Multiwall Duplex Pvt. Ltd., Kashipur	23.12.2021 to 24.12.2021
Dr. Shubhang Bhardwaj "Sc. & Dr. Shivaker Mishra "Sc.	Cheema papers Ltd, Kailashi Devi pulps and paper ltd in Jaspur Kashipur	27.12.2021 to 28.12.2021
Mr. Alok Kumar Goel, Scientist E-II	Mr. Deepak Kumar "SDM" held a meeting regarding R.O in Deoband	31.12.2021
Mohd. Salim, Scientist B	ICAR - Indian Agricultural Research Institute in New Delhi	10.06.21 to 11.06.2021
Dr. Nitin Kumar, Scientist-B and Dr. Jitender Dhiman, Scientist-B	Bajaj Hindustan Sugar Mill at Shitla Khera, U.P.	05-01-22.
Mr. Kumar Anupam Scientist B, Dr. Shivaker Mishra , Scientist E-II	Aroma Kraft & Tissues Limited and Sagar Pulp & Paper Mills Limited in Manglore, Roorkee	06.01.2022
Dr. Shivaker Mishra, Scientist E-II	Aadharshree Paper Mills Limited & Uttranchal Paper Mills Limited in Manglore, Roorkee	07.01.2022
Dr. Nitin Endlay, Scientist E-II	Shuklambara Paper Mills Bajpur, KM Paper Limited Kicha , Chadha Paper Mills,	13.01.2022 to 15.01.2022

	Bilaspur	
Mr. Akhil Naithani, Admin. Exe	UKCPCB office, Roorkee , Orgami Cellulo Pvt Ltd., Roorkee and Dev Bhoomi Pulp & Paper Industries Pvt Ltd., Jwalapur, Haridwar	20.01.2022
Dr. Shivaker Mishra, Scientist E-II	UKCPCB Office in Roorkee, Orgami Cellulo Pvt. Ltd. In Roorkee and Dev Bhoomi Pulp & Paper Industries Pvt. Ltd. in Jwalapur Haridwar	20.01.2022
Dr. A.K. Dixit, Scientist E-II Mr. Kumar Anupam, Scientist B, Mohd. Salim, Scientist B	K C Engineer, Poplar Scientific, and Quality Equipments in Ambala. Kamakshi paper mill and Coral Newsprint Limited in Gajrola (U.P.)	24.01.2022 to 25.01.2022
Dr. Shivaker Mishra, Scientist E-II	Anandeshwar Paper Industries Limited, Kanpur Dehat (U.P)	22.01.2022 to 25.01.2022
Dr. A.K. Dixit, Scientist F	Bindals Paper Mills in Muzaffarnagar	27.01.2022
Dr. Shubhang Bhardwaj, Scientist B Dr. Satya Dev Negi, Scientist E-I	Genus Paper and board ltd in Moradabad	28.01.2022
Dr. Nitin Endlay, Scientist E-II	Haryana Pollution Control Board Regional Office, Yamuna Nagar, Ambala / Blanket Industry: Yamuna Nagar (Built) (Unit: Shree Gopal), Ambala 1. GG international, Hare Krishna Industries, m.d j texofub, Vijay Modern Lutesh pvt ltd.	02.02.2022 to 03.02.2022
Mr. Alok Kumar Goel, Scientist E-II	Paper Section DPIIT & PFMS Office in New Delhi	17.02.2022
Dr. A.K. Dixit Scientist F, Mr. Alok Kumar Goel, Scientist E-II	NCCBM in Ballabgarh Paper Section DPIIT & PFMS Office in New Delhi	21.02.2022 21.02.2022
Ms. Anuradha V. Janbade, Scientist E- II	JK House Delhi, DPIIT, CPCB, IPMA	23.02.2022 to 24.02.2022
Dr. Shivaker Mishra, Scientist E-II,	Silverton Paper Mills, Unit-I in	

Dr. Nitin Kumar Scientist B, Mohd. Salim, Scientist B	Muzaffarnagar Regional office, Uttar Pradesh pollution control board, Muzaffarnagar North West Paper Craft, Shiv Shakti Knit Lab, Allysa Home Furnishing, Shiv Shakti Spuntex in Karnal Haryana	24.02.2022 to 25.02.2022
Dr. Shivaker Mishra Scientist E-II Dr. Arvind Sharma Scientist B	Shree Bhageshwari Paper Mill (unit-I and unit -II), & Siddheshwari Industries Pvt. Ltd. in Muzaffarnagar	02.03.2022 02.03.2022
Dr. Satya Dev Negi, Scientist E-I Mr. Deepak Sharma, JRF Dr. Arvind Sharma, Scientist B	Silvertone paper limited (Unit -I and II), Bindlas Duplex (unit-I & unit-II) in Muzaffarnagar, U.P.	03.03.2022
Mr. Akhil Naithani "Admin. Exe Dr. Arvind Sharma, Scientist B	Silverton papers ltd. (unit-I & unit-II) Tirupati Balaji Fibers Limited and Sidhballi Paper Mills in Muzaffarnagar	03.03.2022 to 04.03.2022
Mr. Kumar Anupam Scientist B Dr. Arvind Sharma Scientist B	Aggarwal Duplex Board Mills Limited in Muzaffarnagar, U.P.	05.03.2022
Dr. Shivaker Mishra Scientist E-II Dr. Nitin Kumar Scientist B, Dr. Nitin Endlay Scientist E-II , Dr. Shubhang Bhardwaj, Scientist B	Prolific Papers Limited, Aliganj Road , Kashipur and Century Pulp and Paper, Lalkaun, Nainital Regional office, Uttar Pradesh pollution control board, Muzaffarnagar Meenu Paper Pvt Ltd., Parijaat Paper Private Limited in Muzaffarnagar	08.03.2022 to 10.03.2022
Dr. A.K. Dixit Scientist F, Dr. Arvind Sharma Scientist B, Mr. Kumar Anupam Scientist B	NCCBM in Ballabgarh	10.03.2022 to 13.03.2022
Dr. M.K Gupta, Director , Ms. Anuradha Janbade, Scientist E-II	Delhi and Faridabad to participate in RSC DCPPI	10.3.2022 – 11.03.2022

	Training Programme at NCCBM Faridabad	
Mohd. Salim, Scientist B, Mr. Akhil Naithani, Admin. Exe	Shakumbari Pulp And Paper Limited, Garg Duplex Limited in Muzaffarnagar Meenu Paper Mills pvt. Ltd. Muzaffarnagar, Parijaat paper mills Ltd. Muzaffarnagar	11.03.2022
Dr Nitin Endlay, Scientist E-II & Mr Mohd Salim, Scientist B	Shreyans Paper Ltd . Ahmed Garh Punjab	15.3.2022
Dr. Arvind Sharma, Scientist B, Mr. Akhil Naithani ,“Admin. Exe.” Anuradha V. Janbade Scientist E-II, Mohd. Salim, Scientist B Dr. Nitin Endlay Scientist E-II	KK Duplex Muzaffarnagar, Mahalaxmi Craft & Tissues Muzaffarnagar KK Duplex and Paper Mills Pvt. Ltd. Muzaffarnagar, Mahalaxmi Paper Mills Muzaffarnagar NEERI Shriyansh industries (unit papers) Ahmadgarh Punjab, Shree shanty tubes Karnal, S S International Karnal, Shree krishna enterprise Karnal, Super enterprise Karnal Shreyansh industries ltd ahmadgarh, Haryana pollution control board , Regional Office and Lower Electroplanting Textiles / Blanket Industry - Nirmal Industries, Super enterprise, Mr. Shanti Tubes and SS International	15.03.2022 to 17.03.2022
Dr. Shivaker Mishra, Scientist E-II Dr. Nitin Endlay, Scientist E-II	M/s Shakti kraft & tissues private limited & M/s Genus paper & boards limited , unit-II in Muzaffarnagar Meenu paper pvt ltd., Parijaat paper private limited in Muzaffarnagar	22.03.2022
Dr. M.K Gupta, Director , Ms. Anuradha Janbade, Scientist E-II	UNIDO and IPPTA, New Delhi	23.3.2022 – 27.3.2022
Dr. Nitin Endlay, Scientist E-II	Suchi Paper Mill Noida, Kavatra	23.03.2022



	Paper Mill Dadri, Sandeep Paper Mill Noida, Shree Ganga Paper Mill Ghaziabad, Ashoka Paper Mill Ghaziabad, Magnum Paper Mill Ghaziabad, OTR Paper Mill Dasna, UNIDO Office Lodhi Road New Delhi, IPPTA Seminar Hotel Leele Shadhra, Janki News Paper Limited Meerut	to 25.03.2022
Dr. Nitin Endlay, Scientist E-II Dr. A.K. Scientist F	Coral Newsprints Ltd., Koshambi Paper Mills Private Limited, Kamakshi Paper Private Limited in Muzaffarnagar UNIDO New Delhi & IPPTA AGM, New Delhi	24.03.2022 to 26.03.2022
Dr. A.K. Dixit, Scientist F	Disha paper limited And Krishnachal paper limited	29.03.2022
Dr M.K.Gupta , Director, Dr Shivaker Mishra , Scientist E-II, Dr Nitin Endlay, Scientist E-II ,Mr Mohd Salim, Scientist B  (Assisted by Mr S. D Negi, Scientist E-I Dr Arvind Sharma, Scientist B, Dr Jitender Dhiman, Scientist B Dr Nitin Kumar, Scientist B, Mr Shubhang Bhardwaj, Scientist B Mr Deepak Sharma and Mr AkhiLNaithani )	Over 127 Units located in Kashipur, Jaspur , Bazpur, Haridwar, Lalkuan , Roorkee , in Ganga River Basin & 60 units in Hindon River Sub basin located in Ambala,Kurukshetra Ghaziabad , Noida, Karnal , Yamunanagar Muzaffarnagar , Saharanpur etc	December 2021 – March 2022

## ACADEMIC ACTIVITIES AT CPPRI

### M.Sc. (Cellulose and Paper Technology) - A Joint Collaborative Course of FRI, Deemed to be University, Dehradun and CPPRI, Saharanpur

The final year classes of the students of the 10<sup>th</sup> batch (2020 -22) of M.Sc. (Cellulose and Paper Technology) were conducted at CPPRI. Both theoretical and practical knowledge on various aspects of pulp and papermaking i.e. raw material handling and preservation, pulping and bleaching, stock preparation and papermaking, paper recycling, paper properties, specialty paper, chemical recovery, environmental management and biotechnological applications were imparted to the students by CPPRI scientists.

The students also carried out one month compulsory project work in various areas of paper making as a part of curriculum.

The first year toppers in girls and boys category namely **Ms. Trinadha Chatterjee** and **Mr. Chirag Sharma** respectively were awarded scholarship of Rs 25,000/- each by Star Paper Mills Limited.

#### List of Students

Mr. Abhineet Kumar, Mr. Ankit Kumar, Ms. Athulya Soman, Mr. Chirag Sharma, Ms. Dharitri Borsaikia, Ms. Lazuli Bhomick, Mr. Makak Mayam Rejwan Ahamed, Ms. Priyanksha Jung, Mr. Rajvardhan Singh Chouhan, Ms. Sandhya Rawat, Ms. Sarita Yadav and Ms. Trinadha Chatterjee

#### Doctoral Program

##### Ph.D. Synopsis Submitted

The following Ph.D synopsis were presented to the Select Committee of FRI /CPPRI and approved by the same.

S. No.	Name of Candidate	Topic of Synopsis	Guide (s)
1	Ms. Gunjan, JRF, PCPB Division	Study on valorization of bamboo for production of various grades of pulp and paper	Dr. Priti Shivhare Lal & Dr. Arvind Kumar Sharma
2	Ms. Shrutikona	Rheological study of wood and nonwood	Dr. A. K. Dixit

	Das, Chemical Recovery Division	JRF,	black liquor	
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Scientist of CPPRI along with RAC members during presentation of Synopsis by the Candidates

## RIGHT TO INFORMATION

Central Pulp and Paper Research Institute has been implementing the Right to Information Act, 2005 since the promulgation of the Act. In compliance of the provision of the RTI Act 2005, CPPRI has constituted a RTI cell. Further, the Director is designated as First Appellate Authority (FAA) for addressing the appeals/complaints, filed by the Appellant. At present, Dr. M.K.Gupta, Director CPPRI is the designated First Appellate Authority (FAA) in the Institute. Shri Alok Kumar Goel, Scientist E-II is the Public Information Officer (PIO), who is assisted by Smt. Sarita Sharma, Library Officer- B as the Assistant Public Information Officer (APIO). Dr. Shivaker Mishra is the nodal officer of the Institute for RTI purposes.

RTI cell keeps record of all the RTI applications/appeals being received in the Institute and also monitors their timely disposal.

CPPRI has provided the required information on its website ([www.cppri.res.in/rti](http://www.cppri.res.in/rti)) under Suo Moto disclosure on proactive basis and also the same being updated on regular basis.

During the year 2021-2022, Under RTI Act - 2005, CPPRI received total 24 numbers RTIs and 3 Appeals. Details are as under:

### RTI Status (2021-2022)

Year	RTI Applications Received	RTI Applications Disposed	Appeal Received	Appeal Disposed	Applications Rejected
2021-2022	24	24	3	3	00

Reports under the RTI Act -2005 are furnished to the Central Information Commission (CIC) on quarterly basis.



## OFFICIAL LANGUAGE NEWS

The following activities were conducted by the Official Language Cell during the year 2021-2022.

### Organization of Hindi Month from 1<sup>st</sup> – 30<sup>th</sup> September, 2021

Hindi Month was organized in the institute during 1st – 30th September, 2021. Under this activity essay, book review and poster competitions were organized in Hindi for the employees and students of the institute to promote the use of Hindi language in the day-to-day activities of the institute.

A total of 21 employees of the institute and their family members participated in these competitions. On the occasion of Hindi month festival, a book exhibition was also organized by the library of the institute in the auditorium on September 01, 2021. Hindi month award distribution ceremony was organized in the auditorium of the institute on 30<sup>th</sup> September 2021.

The chief guest of the function was Dr. Jaya, who is an Associate Professor with the Munna Lal and Jai Narayan Khemka Womens College in the Hindi department. In the function, Dr. Jaya presented a lecture on the topic "Glory of Official Language Hindi and Simplicity of Hindi".

In this program the results of competitions organized in the celebration of Hindi month were declared and winners and participating candidates were awarded. During the Hindi month, posters of quotes given by the great personalities of the country on the importance, promotion and dissemination of Hindi were put up at various places in the institute.

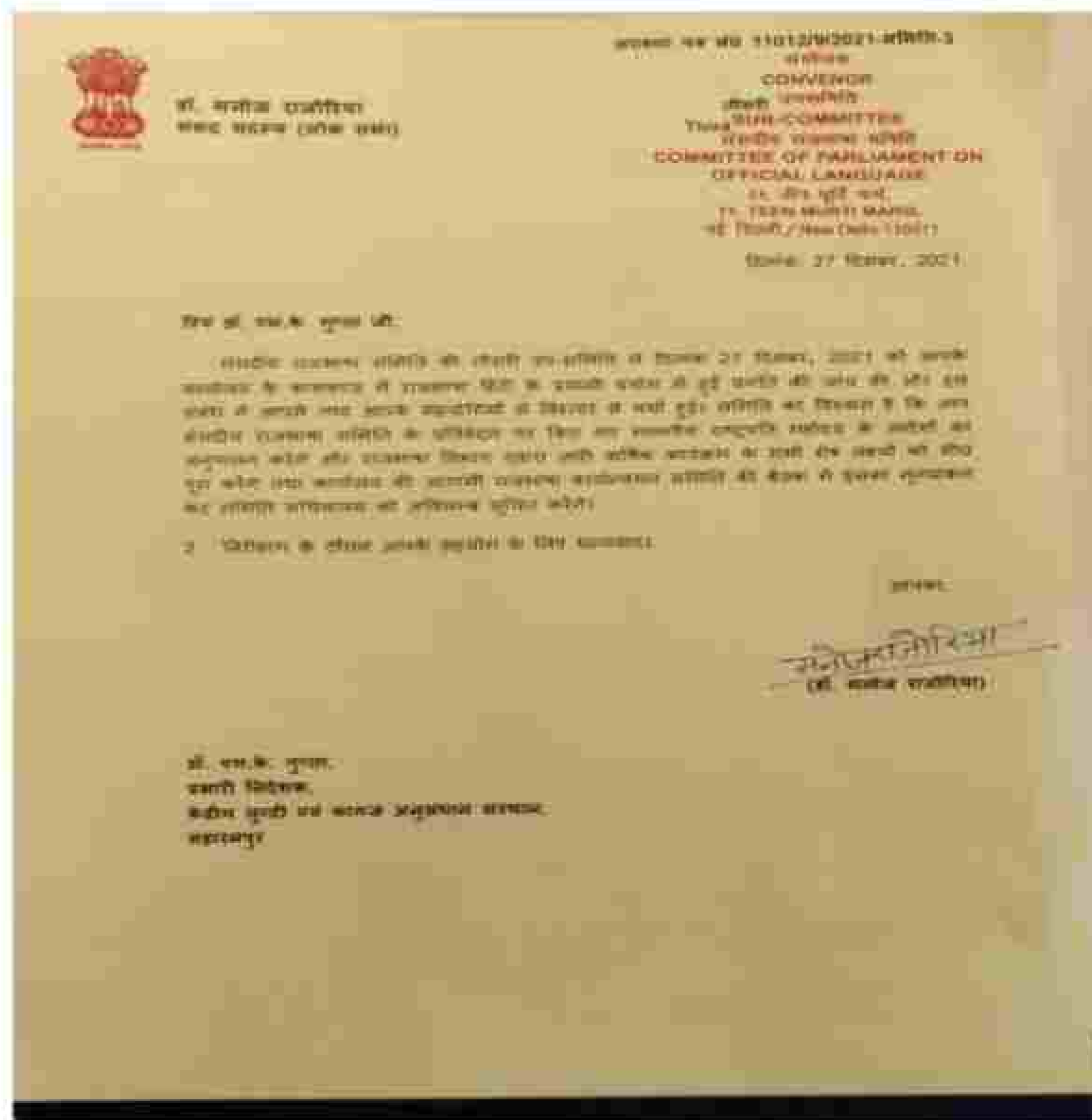
### Inspection of the Institute by the Third Sub-Committee of the Parliamentary Committee on Official Language

On December 27, 2021, under the chairmanship of Hon'ble Dr. Manoj Bhadoria, Member of Parliament (Lok Sabha), the third sub-committee of the Parliamentary Official Language Committee in New Delhi reviewed / inspected various points related to the progressive use of official language Hindi in the work of the Institute.

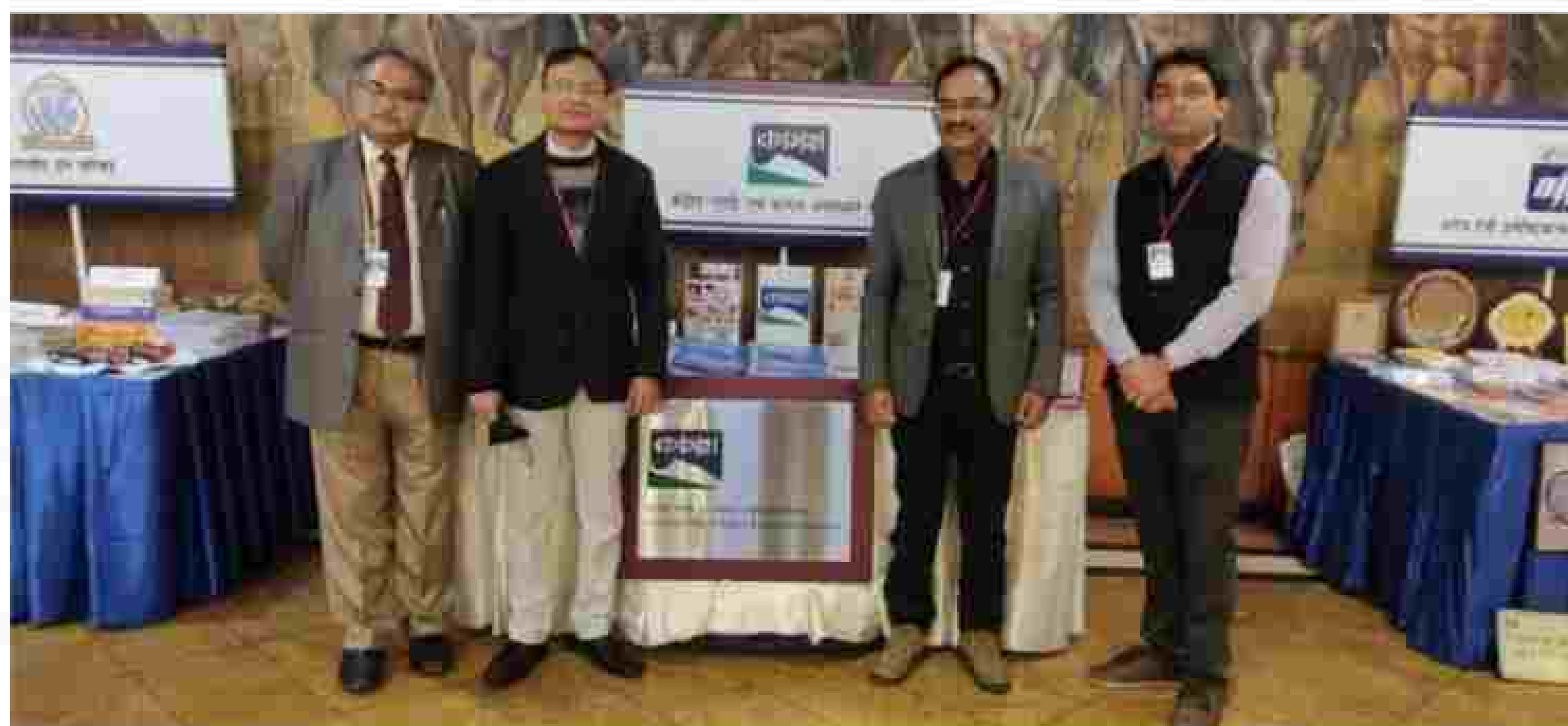
Dr. M.K. Gupta, Director, CPPRI (President, Official Language Cell), Dr. Nitin Endley, Scientist E-II (Vice President and Member Secretary, Official Language Cell) and Shri Kumar Anupam, Scientist B appeared before the above Parliamentary Committee and apprised the Committee about the progress of work in official language Hindi by the Institute.



Receiving review paper by the Parliamentary Committee on Official Language regarding the use of official language in the work of the Institute by the members of the CPPRI Official Language Cell.



Review letter by the Parliamentary Official Language Committee regarding the progress in the use of official language in CPPRI, released after inspection



CPPRI Director and Scientist with Shri Rajesh Kumar Singh, Joint secretary, DPIIT (Official language) at the exhibition site.

### **World Hindi Day Organized on 10 January 2022**

Poetry recitation, poster and essay writing competitions were organized by the Central Pulp and Paper Research Institute, Saharanpur on the occasion of World Hindi Day on 10 January 2022. MSc, PhD students of the Institute and JRF/SRF participated in these competitions. The topic of essay writing was the utility of Hindi language in the development of the nation and the theme of the poster was official language Hindi.

In the program, students from Kerala, Assam, Bengal, Manipur, Haryana, Tripura, Uttarakhand recited poetry in their mother tongue and narrated its meaning to the audience in Hindi

### **International Mother Language Day and City Official Language Implementation Committee (NARACAS) meeting 21 February 2022**

International Mother Language Day was celebrated at the Central Pulp and Paper Research Institute (CPPRI). International Mother Language Day is celebrated every year on 21 February to promote awareness of linguistic diversity and cultural diversity and to promote multilingualism.

On this occasion a half yearly meeting of NARACAS (Nagar Rajbhasha Kiryanvyan Simiti, Saharanpur) under the Ministry of Home Affairs, Government of India was organized. 22 members from different offices and institutions of the Central Government located in Saharanpur participated in this meeting and the compliance of official language in these offices was reviewed. In the meeting, the second issue of the annual magazine of NARACAS i.e. "Sanyukta" was released.



# FINANCIAL REPORT 2021-2022





**Kinra & Associates**  
Chartered Accountants

H. No. 32, Phase III-B  
Pant Vihar, ITC Road, Saharanpur  
Contact - 91- 7906192914

**CENTRAL PULP & PAPER RESEARCH INSTITUTE**

An autonomous organisation registered under societies Act under the administrative control of the Ministry of  
Commerce & Industry (Govt. of India)

POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR (U.P.)

**AUDITOR'S REPORT TO THE MEMBERS OF THE  
CENTRAL PULP AND PAPER RESEARCH INSTITUTE, SAHARANPUR (U.P.)**

We have audited the attached Balance Sheet of CENTRAL PULP AND PAPER RESEARCH INSTITUTE, SAHARANPUR (U.P.) as on 31.3.2022 and Income and Expenditure account & Receipt & Payment Account for the year ended on that date, which are in agreement with the books of accounts maintained by the Institute. These financial statements are the responsibility of the auditee's management. Our responsibility is to express an opinion on these financial statements based on our Audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. An audit include examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of audit. In our opinion proper books of accounts have been kept/ maintained by the Institute.

In our opinion and to the best of our information and according to the explanation given to us, the said account reads with notes thereon; give a true and fair view in conformity with the accounting principles generally accepted in India:

- i) In case of Balance Sheet, of the state of affairs of the Institute as at 31.03.2022, and
- ii) In the case of Income & Expenditure Account of the deficit for the year ended on 31.03.2022.

Date: 23-09-2022

Place: Saharanpur

For Kinra & Associates  
Chartered Accountants

  
(GAGAN KINRA)  
F.C.A., M.Com., LL.B.  
M. No. 425037

UDIN: 2242503AV6M6A7791



Kinra & Associates  
Chartered Accountants

H. No. 32, Phase III-B  
Pant Vihar, ITC Road, Saharanpur  
Contact - 91- 7906192914

**CENTRAL PULP & PAPER RESEARCH INSTITUTE**  
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control of the Ministry of Commerce & Industry (Govt. of India)  
POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR  
BALANCE SHEET AS AT 31.03.2022

Amount (Rs.)

PARTICULARS	Schedule	Current Year	Previous year
		2021-22	2020-21
<b>CAPITAL FUND AND LIABILITIES</b>			
CAPITAL FUND	1	123424938.45	120890103.02
UN-UTILISED SP. PROJECT & CONSULTANCY	2	1124.25	1124.25
UNUTILISED GRANTS	3	47689722.85	38491658.66
CURRENT LIABILITIES AND PROVISIONS	4	52270811.06	58782574.67
<b>TOTAL</b>		<b>223386596.61</b>	<b>218165460.60</b>
<b>ASSETS</b>			
FIXED ASSETS	5	92026087.81	86274597.08
CURRENT ASSETS, LOANS, ADVANCES ETC.	6	131360508.80	131890863.52
<b>TOTAL</b>		<b>223386596.61</b>	<b>218165460.60</b>

The Schedules referred above form an integral part of the Balance Sheet.

As per our separate report of even date.

FOR Kinra & Associates

CHARTERED ACCOUNTANTS

(Gagan Kinra)

F.C.A., M.Com., LLB

M. No. 425053

PLACE: SAHARANPUR

Date: 23-09-2022

FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE

DIRECTOR

HEAD (F&A)

Kinra & Associates  
Chartered Accountants

H. No. 32, Phase III-B  
Pant Vihar, ITC Road, Saharanpur  
Contact - 91- 7906192914

**CENTRAL PULP & PAPER RESEARCH INSTITUTE**  
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control of the Ministry of Commerce & Industry (Govt. of India)  
POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR  
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31.03.2022

Amount (Rs.)			
PARTICULARS	SCHEDULE	CURRENT YEAR 2021-22	PREVIOUS YEAR 2020-21
<b>A: INCOME</b>			
Income from Institutional & Consultancy fee	7	28798481.80	25370536.00
Grants from Govt. of India	8	73888792.40	86906821.13
Fees/Subscription	9	230000.00	420105.00
Interest earned	10	3037168.87	4000669.00
Other income	11	722245.45	715082.40
Closing Stock-Store Spares & Stationery		2740065.80	2540645.92
<b>TOTAL (A)</b>		<b>109416754.32</b>	<b>119953859.45</b>
<b>B: EXPENDITURE</b>			
Opening Stock		2540645.92	2341838.61
Establishment expenses	12	62747808.40	67524775.00
Administrative Expenses etc.	13	40462094.98	40668797.01
Depreciation for current year	5	11500534.00	10438141.00
<b>TOTAL (B)</b>		<b>117251083.30</b>	<b>120973551.62</b>
Excess of Expenditure over Income (B-A)		7834328.98	1019692.17
Excess of Income over Expenditure(A-B)		0.00	0.00

The Schedules referred above form an integral part of the Income and Expenditure Account  
As per our separate report of even date.

FOR Kinra & Associates  
CHARTERED ACCOUNTANTS

  
(Gagan Kinra)  
F.C.A., M.Com., LLB  
M. No. 425053  


FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE

  
DIRECTOR

  
HEAD (F&A)

PLACE: SAHARANPUR  
Date: 23-09-2022



Kinra & Associates  
Chartered Accountants  
H. No. 32, Phase III-B  
Pant Vihar, ITC Road, Saharanpur  
Contact - 91-7906192914

**CENTRAL PULP & PAPER RESEARCH INSTITUTE**  
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POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR  
RECEIPT & PAYMENT ACCOUNT FOR THE YEAR ENDED 31.03.2022.

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
Opening Balance			Establishment Expenses		
To Bank Balance on current account	21372562.39	18562702.78	By Salary & Allowances	46652827.40	53485706.00
To Deposit Accounts (Margin money against letter of Credit)	13669183.00	5719183.00	By CPF Contribution	4513125.00	4492527.00
To Deposit Accounts	54372861.66	51181710.66	By Encashment of Leave	3571520.00	9682073.00
Grant Received:			By Gratuity paid	5032970.00	9949006.00
To Grant in Aid MOI GOI	25000000.00	9217172.00	By Reimbursement of Medical Exp	1253461.00	1587685.00
To Grant in Aid Development Council	70000000.00	99961948.00	Other Administrative Expenses		
Interest Received:			By Lab & Plant Maintenance	3937692.00	2509170.23
To Int. from Staff on Convey. adv & HBA	73272.00	93926.00	By Carriage & Freight	3050.00	0.00
To Interest received from bank	2963896.87	3463307.00	By Electricity and water	7104081.00	6884340.00
To interest received on TDS	0.00	443436.00	By Repair & Maintenance of Assets	9680348.50	8445906.00
Other Income:			By Rent & Taxes	857304.00	816480.00
To Refund of TDS	0.00	1879304.00	By Postage & Telephone & communication	112292.08	142860.00
To Testing fee	16371817.00	15443711.48	By Printing & Stationery	797887.00	789553.00
To Consultancy fees	11730656.76	939086.08	By Travelling & Conveyance Exp	1178843.00	852646.00
To Msc. Course Fee	837500.00	164000.00	By Exp on Seminar & Workshop	5400.00	0.00
To Library Fee	37000.00	8000.00	By Membership & Subscription	12000.00	5200.00
To Training fees & expenses etc	195000.00	355105.00	By Audit fees	41500.00	37760.00
To Membership fee & Taxes etc	35000.00	65000.00	By Hospitality Expenses	48773.00	17179.00
To Lease Rent	71500.00	62500.00	By Legal & Professional Exp	472466.40	112140.00
To Hostel rent	266000.00	204825.00	By News Paper	26720.00	0.00
To Miscellaneous Receipt	2989.00	48394.66	By Training Exp	1340563.00	228414.00
To Licence Fee	245074.00	278887.00	By Watch & Ward	6562082.00	8376075.00
To Laboratory fee	28000.00	0.00	By Bank charges	26426.43	203040.16
Advances			By Advertisement	24114.00	57488.00
To House Building Advance	82108.00	365320.00	By Testing Fee paid	99800.00	224154.00
To Conyance Advance	6000.00	18000.00	By Staff Car Maintenance	758292.00	328428.00
To Computer Advance	42000.00	49000.00	By Hindi Divas Exp	381592.00	4000.00
To Accrued interest on staff advances	32530.00	370505.00	By Swachh Bharat Abhyas Exp	2012676.00	1998917.00
Other Receipt:			By Software expenditure on IT	1006603.17	4389178.00
To CGST	37574.35	188455.00	By Paper ex	19920.00	0.00
To CGST	37574.35	188455.00	By Expenditure on NABL	114420.00	0.00
To IGST	137127.20	0.00	By Grant in Aid to Participating Agency	4860000.00	1678000.00
To Security from Student	0.00	34000.00	By Honorarium	82300.00	129500.00
To Sale of Assets	0.00	22550.31	By National Festival	63140.00	44222.00
To Sundry Debtors	351597.45	1097293.00	By Plantation & Gardening	167750.00	126643.00
To Scholarship for M.Sc. Students	50000.00	50000.00	By Electric Consumable	333878.00	0.00
To Advance to Supplier	189207.60	755760.00	By Consultancy fee paid	223000.00	0.00
			By scholarship for M.sc Student	50000.00	0.00
			Fixed Assets/ Capital work in Progress	15967778.48	10812551.70
			Other Payments:		
			By T.D.S. (Salary & Parties)	599968.00	844860.00
			By TDS - GST	39437.00	405174.00
			By TDS - Technical	1781.00	0.00
			By SGST	209155.00	0.00
			By CGST	209155.00	0.00
			By IGST	449681.00	85132.00
			By Advance to Staff	344608.15	146102.51
			By Refund of Security	14000.00	32000.00
			By Advance to Suppliers	4577389.77	779109.00
			By Payment to Parties	1970345.00	2400166.50
			By TDS deducted by Parties	1285069.00	854665.82
			By Refund of Grant	114479.00	0.00
			Closing Balances:		
			By Bank Balance on current account	26932635.99	21372562.39
			By Deposit A/c (Margin money against L.C.)	2340995.00	13669183.00
			By Deposit Accounts	57218277.66	54372861.66
<b>TOTAL</b>	<b>218021031.13</b>	<b>221170339.97</b>	<b>TOTAL</b>	<b>218021031.13</b>	<b>221170339.97</b>

As per our separate report of even date  
FOR Kinra & Associates  
CHARTERED ACCOUNTANTS  
  
(Gagati Kinra)  
F.C.A., M.Com., LL.B.  
M. No. 425053  
PLACE SAHARANPUR  
Date: 23-09-2022

FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE  
  
DIRECTOR  
  
HEAD (F&A)

Kinra & Associates  
Chartered Accountants

H. No. 32, Phase III-B  
Pant Vihar, ITC Road, Saharanpur  
Contact - 91- 7906192914

**CENTRAL PULP & PAPER RESEARCH INSTITUTE**  
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POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR  
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2022  
SCHEDULE 1 - CAPITAL FUND

PARTICULARS	CURRENT YEAR 2020-21		PREVIOUS YEAR 2020-21	
	<b>CAPITAL FUND</b>			
Balance as at the beginning of the year	120890103.02		119165903.45	
<b>Add:1:</b>				
Cess Project (Capital Purpose)	9271902.41		2743891.74	
Plan Project (Capital Purpose)	1097262.00		0.00	
	131259267.43		121909795.19	
<b>less:-</b>				
Balance of net expenditure transferred from the income & expenditure account	7834328.98	123424938.45	1019692.17	120890103.02
<b>BALANCE AS AT THE YEAR - END</b>		<b>123424938.45</b>		<b>120890103.02</b>

As per our separate report of even date.  
FOR Kinra & Associates  
CHARTERED ACCOUNTANTS

  
(Gagan Kinra)  
F.C.A., M.Com., LLB  
M. No. 425053



FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE

  
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PLACE: SAHARANPUR  
Date: 23-09-2022



Kinra & Associates  
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SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31.03.2022

**SCHEDULE - 2 - DETAILS OF UN-UTILIZED AMOUNT SPONSORED PROJECT/CONSULTANCY**

Sl. No	NAME OF PROJECT	CURRENT YEAR	PREVIOUS YEAR
		2021-22	2020-21
		AMOUNT	AMOUNT
1	DBT-Technological improevmt of Process	1124.25	1124.25
		<b>1124.25</b>	<b>1124.25</b>

As per our separate report of even date

FOR Kinra & Associates  
CHARTERED ACCOUNTANTS

  
(Gagan Kinra)  
F.C.A., M.Com., LLB  
M. No. 425053  


FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE

  
DIRECTOR

  
HEAD ( F&A)

PLACE: SAHARANPUR  
Date: 23-09-2022

Central Pulp & Paper Research Institute  
Annual Report 2021-22



H. No. 32, Phase III-B  
Part Vihar, ITC Road, Saharanpur  
Contact - 91 - 7905192914

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POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR  
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31.03.2022  
SCHEDULE - 3 - DETAILS OF UN-UTILIZED GRANT

**Kinra & Associates**  
Chartered Accountants

PARTICULARS	BALANCE 1.4.2021				GRANTS RECEIVED & UTILISED DURING 2021-22			NET FUNDS		UTILISED		UNSPENT BALANCE	
	AMOUNT	RECEIVED AMOUNT	REFUNDED AMOUNT	Advance from CPPRI (IRG)	FORWARD	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
Plan Grant	114479.00	3500000.00	114479.00	2500.00	0.00	3502500.00	3490230.00	1202.00	114479.00				
Plan (Capital) a/c	0.00	4000000.00	0.00	1000000.00	0.00	4100000.00	1077260.00	3007738.00	0.00				
BASE LEVEL SUPPORT(NON-PLAN)	259104.40	60759104.40	0.00	0.00	0.00	60759104.40	59994102.40	765002.00	259104.40				
Swatcha Action Plan	0.00	2000000.00	0.00	28000.00	0.00	2028000.00	2017445.00	10555.00	0.00				
Cess Funded project													
A review study of ITS-MS classification	614000.00	1062000.00	0.00	0.00	0.00	600000.00	60441.00	739559.00	614000.00				
Biocatalytic Cellulose Production for Divers	4200000.00	1800000.00	0.00	0.00	0.00	6000000.00	163784.00	5836216.00	4200000.00				
Condensed Lignin for Technical Personnel in Pulp & Paper Industry	1773160.00	0.00	0.00	0.00	0.00	1773160.00	1645160.25	127919.75	1773160.00				
Determination of Ozonolysis Treatment Technology	4834630.00	0.00	0.00	0.00	0.00	4834630.00	2972534.00	1862096.00	4834630.00				
Biopolymeric approach for improvement of Land Application of Treated Effluent (I)	642290.00	12564000.00	0.00	0.00	0.00	13000000.00	495736.00	12710554.00	642290.00				
Land Application of Treated Effluent (I)	2000000.00	3000000.00	0.00	0.00	0.00	3400000.00	413348.00	3026652.00	2000000.00				
Studies on Alternative Acid Carboxylation	7500000.00	3200000.00	0.00	0.00	0.00	10700000.00	257779.00	1044221.00	7500000.00				
Study on Depolymerisation of Agro Residue	1694891.00	2800000.00	0.00	0.00	0.00	4248891.00	595601.00	3649290.00	1694891.00				
Creation of Testing Facilities for Food Packaging paper	8908722.12	0.00	0.00	0.00	0.00	8908722.12	7398745.16	607975.96	8908722.12				
Census Survey of the Indian Paper Industry	2367353.00	0.00	0.00	0.00	0.00	2367353.00	1016767.00	1350586.00	2367353.00				
A Synthesis and Economical Approach for Treatment of Pulp & Paper Mill	1977812.00	0.00	0.00	0.00	0.00	1977812.00	637493.00	1140319.00	1977812.00				
Cess zone construction of Div.	1898557.00	1700000.00	0.00	0.00	0.00	3598557.00	3448108.00	2150449.00	1898557.00				
Screening of Parents for Clonal Forestry & Hybridization for Higher Productivity	608514.14	0.00	0.00	0.00	0.00	608514.14	353372.00	255142.14	608514.14				
<b>Total =</b>	<b>38491658.66</b>	<b>85000000.00</b>	<b>114479.00</b>	<b>130500.00</b>	<b>1550000.00</b>	<b>131947979.66</b>	<b>84257955.81</b>	<b>47689722.85</b>	<b>38491658.66</b>				

As per our separate report of even date.  
FOR Kinra & Associates  
CHARTERED ACCOUNTANTS

(Gagan Kinra)  
F.C.A., M.Com.,  
M. No. 425053



PLACE: SAHARANPUR  
Date: 23-09-2022

FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE

DIRECTOR

HEAD (F&A)

Kinra & Associates  
Chartered Accountants

H. No. 32, Phase III-B  
Parit Vihar, ITC Road, Saharanpur  
Contact - 91- 7906192914

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POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR  
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2022  
SCHEDULE 4 - CURRENT LIABILITIES AND PROVISIONS

S.No	PARTICULARS	CURRENT YEAR		PREVIOUS YEAR	
		2021-22		2020-21	
A.	<b>CURRENT LIABILITIES AND PROVISIONS</b>				
	<b>CURRENT LIABILITIES:</b>				
	<u>Other Liabilities</u>				
1	Retention Money received	32792.00		32792.00	
2	Security Received from Contractors	82212.00		82212.00	
3	Earnest money received	93900.00		93900.00	
4	Advance received for services	214855.00		214855.00	
5	Security received from students	33000.00		47000.00	
6	Security Received from Staff	23000.00		23000.00	
7	SGST	37574.35		209155.00	
8	CGST	37574.35		209155.00	
9	IGST	137127.30		449681.00	
10	Debtors at credit	103089.00		0.00	
11	Scholarship for MSC Student	50000.00	845124.00	50000.00	1411750.00
	<b>TOTAL (A)</b>		<b>845124.00</b>		<b>1411750.00</b>
B.	<b>PROVISIONS:</b>				
1	Expenses payable	158201.00		2005601.00	
2	Pro. for gratuity & encashment of leave	50897019.00		52067820.00	
3	Audit fee payable	41500.00		0.00	
4	Performance Bank Gurantee	31317.00		31317.00	
5	Fellow Ship payable	13000.00		13000.00	
6	Income Tax (TDS) Payable	123677.00		77161.00	
7	GST (TDS) Payable	141999.06		45871.67	
8	Arrear of Salary & CPF Contribution	18974.00	51425687.06	3130054.00	57370824.67
	<b>TOTAL (B)</b>		<b>51425687.06</b>		<b>57370824.67</b>
	<b>TOTAL (A+B)</b>		<b>52270811.06</b>		<b>58782574.67</b>

As per our separate report of even date.

FOR Kinra & Associates  
CHARTERED ACCOUNTANTS

  
(Gagan Kinra)  
F.C.A., M.Com., LL.B  
M. No. 425053  


FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE

  
DIRECTOR

  
HEAD (F&A)

PLACE: SAHARANPUR  
Date: 23-09-2022



H. No. 32, Phase III-B  
Part Vihar, ITC Road, Saharanpur  
Contact - 91-7906192914

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**POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR**  
SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31.03.2022

Kimra & Associates  
Chartered Accountants

**SCHEDULE - 5 - FIXED ASSETS**

Sl No	PARTICULARS	GROSS BLOCK		NET VALUE ON 1.4.2021	ACQUISITION DURING THE YEAR		SALES DURING THE YEAR	COST AT THE YEAR END	%AGE OF Dep	DEPRECIATION FOR 2021-22	NET BLOCK	
		TOTAL COST AS ON 1.4.2021	TOTAL ADDITIONS 31.3.2021		FIRST HALF	SECOND HALF					AS AT THE 31.3.2021 YEAR-END	AS AT THE 31.3.2021 YEAR-END
<b>A - FIXED ASSETS</b>												
1	Land	16872204.10	0.00	16872204.10	0.00	0.00	0.00	16872204.10	0%	0.00	16872204.10	16872204.10
2	Land Slabbing works in Progress	487684.45	0.00	487684.45	0.00	0.00	0.00	487684.45	0%	0.00	487684.45	487684.45
3	Building	116372547.34	107161147.90	9211399.28	0.00	0.00	0.00	9211399.28	10%	921139.93	8290259.35	9211309.28
4	Office Equipment	17743275.86	12510383.90	5716000.00	9500.00	0.00	0.00	5817411.96	10%	581266.00	5235145.96	5232311.96
5	Furniture & Fixtures	8925111.38	7386432.31	1538679.07	65897.00	0.00	0.00	1730020.07	10%	173002.00	1567018.07	1538679.07
6	Motor Furniture	408288.00	2088804.81	9483.25	0.00	0.00	0.00	9483.25	10%	948.33	8535.92	9483.25
7	Vehicle	293118.84	2527357.00	403761.84	0.00	0.00	0.00	403761.84	15%	60594.00	343167.84	403761.84
8	Plant Machinery & Lab Equipment	287908124.93	243522876.47	44383248.46	14541172.48	0.00	0.00	50119258.94	15%	7777301.00	51341937.94	44383248.46
9	Plant & Machinery in HKT	5800000.00	5756885.29	43114.71	0.00	0.00	0.00	43114.71	15%	6487.00	36647.71	43114.71
10	Equipment with NCBM	5000000.00	481130.14	8808.86	0.00	0.00	0.00	8808.86	15%	1321.00	7488.86	8808.86
11	Workshop equipment	536385.07	504384.11	31990.96	0.00	0.00	0.00	31990.96	10%	4799.00	27191.96	31990.96
12	Instrument	211032.13	219725.68	308.44	0.00	0.00	0.00	308.44	15%	46.00	262.44	308.44
13	D.G.Set	2094916.68	2067231.99	27684.69	0.00	0.00	0.00	27684.69	15%	4153.00	23531.69	27684.69
14	Air Conditioner & Cooler etc	6450128.72	5429472.86	1077803.86	99758.00	0.00	0.00	1514808.86	10%	219736.00	1295072.86	1077803.86
15	Electrical Install & Equipment	5142007.59	2325462.78	17915.00	41500.00	0.00	0.00	2873559.81	15%	428281.00	2445278.81	2873559.81
16	Books and Periodicals	11147173.37	10443520.65	760.00	3465.00	0.00	0.00	7965.00	40%	282258.00	424619.52	7965.00
17	Computers	18228481.64	17948298.94	1295182.70	263282.00	0.00	0.00	2342567.95	40%	894449.00	1458113.95	1295182.70
18	Capital work in Progress	965125.00	0.00	965125.00	0.00	0.00	0.00	965125.00	0%	0.00	965125.00	965125.00
19	Office Home Equipment	6800.00	2784.00	4015.25	0.00	0.00	0.00	4015.25	10%	402.00	3613.25	4015.25
20	Furniture Equipment (tractor)	415565.00	68827.00	326738.00	0.00	0.00	0.00	446738.00	10%	67011.00	379727.00	326738.00
21	Tubewell	1298684.00	592280.18	899403.82	0.00	0.00	0.00	899403.82	10%	89940.38	809463.44	899403.82
<b>TOTAL OF CURRENT YEAR</b>		<b>925442854.16</b>	<b>479182657.84</b>	<b>88274897.68</b>	<b>10242514.48</b>	<b>8.80</b>	<b>8.80</b>	<b>103526021.81</b>		<b>1156034.80</b>	<b>92546087.81</b>	<b>88274897.68</b>
<b>TOTAL OF PREVIOUS YEAR</b>		<b>491263207.77</b>	<b>408729015.90</b>	<b>82653404.69</b>	<b>10954132.70</b>	<b>3250.31</b>	<b>3250.31</b>	<b>96713728.08</b>		<b>1042814.10</b>	<b>9671497.08</b>	<b>82653404.69</b>

As per our separate report of even date

FOR Kimra & Associates

CHARTERED ACCOUNTANTS



(Gagan Kimra)  
F.C.A., M.Com., LL.B.  
M. No. 425053

PLACE SAHARANPUR

Date: 23-09-2022

FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE

*[Signature]*  
DIRECTOR

*[Signature]*  
HEAD (P&A)

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SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31.03.2022

**SCHEDULE - 6 - CURRENT ASSETS, LOANS, ADVANCES ETC.**

S.No.	PARTICULARS	CURRENT YEAR 2021-2022		PREVIOUS YEAR 2020-21	
	<b>A: CURRENT ASSETS:</b>				
1	<u>Inventories:</u>				
a.	Store & Spares	2071164.76		1940285.89	
b.	Stationery & Misc. Store	658901.04	2740065.80	600360.03	2540645.92
2	Bank Balances (With Scheduled Banks)				
a.	On Current Accounts		26932635.69		21372562.39
b.	On Deposit Accounts( margin money-against letter of credit)		2340995.00		13669183.00
c.	FDR for Bank Guarantee to UPNEDA	104542.00		100000.00	
d.	On Deposit Accounts on SDR	57111735.66	57216277.66	54272861.66	54372861.66
e.	Accrued interest on SDR		1314662.09		1748524.09
	<b>B: LOANS, ADVANCES AND OTHER ASSETS:</b>				
	<u>Loan to Staff:</u>				
1	<u>Interest bearing Advances:</u>				
a.	House Building Advance	896000.00		758108.00	
b.	Advance for Purchase of Vehicle	1328.00		10328.00	
c.	Advances for computer	71500.00		113500.00	
d.	Accrued interest on Advances	343039.00	1111867.00	302297.00	1184233.00
2	<u>Advances and other amounts recoverable in cash or in kind or for value to be received</u>				
	<b>ADVANCES:</b>				
a.	Purchase of Machinery and other work	10769343.94		12230577.94	
b.	Advance Paid to DBT for Biological B.L. Project	50.00		50.00	
c.	Advance to UPRNN	350000.00	11119393.94	350000.00	12580627.94
3	<u>Amounts recoverable in cash or in kind:</u>				
a.	Amount Recoverable	4142.00		4142.00	
b.	T D S	8273974.42		6969547.42	
c.	Convetavliment -Education Cess	1334.00		1334.00	
d.	Convetavliment - H.Education Cess	290.00		290.00	
e.	Convetavliment - K. K. Cess	4999.00		4999.00	
f.	Sundry Debtors	10720686.07		10951298.12	
g.	Plant Equipment of CPCB	2694541.00		2694541.00	
h.	Lab Equipment-IPMA/Dev. Council	1350682.00		1350682.00	
i.	Earnest Money Deposit	50.00		50.00	
j.	N.P.C.	706.75		706.75	
k.	Imprest	27418.70		18662.55	
l.	Advance to CPPRI Staff	312759.50		348614.50	
m.	Security Deposits	1996345.00		1957206.00	
n.	Telephone deposit under OYT	0.00		39139.00	
o.	Interest on FDR Amount Recoverable	39203.18		49813.18	
p.	DCPPAI	27000.00	25454111.62	11000.00	24422225.52
4	Avance paid to PBS Plan Projects		130500.00		0.00
5	<b>GRANT FORWARD AS AN ADVANCE</b>				
a.	PBS Plan Grant forward as an advance		3000000.00		0.00
	<b>TOTAL</b>		<b>131360508.80</b>		<b>131890863.52</b>

As per our separate report of even date.

FOR Kinra & Associates  
CHARTERED ACCOUNTANTS

(Gagan Kinra)  
F.C.A., M.Com., (C.A.)  
M. No. 425053

FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE

DIRECTOR

HEAD (F&A)

PLACE: SAHARANPUR  
Date: 23-09-2022

Kinra & Associates  
Chartered Accountants

H. No. 32, Phase III-B  
Pant Vihar, ITC Road, Saharanpur  
Contact - 91- 7906192914

**CENTRAL PULP & PAPER RESEARCH INSTITUTE**

An autonomous organisation registered under societies Act under the administrative control of the Ministry of Commerce & Industry (Govt. of India)

POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR


SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2022

**SCHEDULE - 7 - INCOME FROM INSTITUTIONAL AND CONSULTANCY FEE**

S.No.	PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
		2021-22	2020-21
1	Testing fee	16332975.00	13543555.00
2	Consultancy fee.	11736506.80	11249981.00
3	Laboratory Fee	28000.00	5000.00
4	Library Fee	38000.00	8000.00
5	M.Sc. Course Fee	663000.00	564000.00
	<b>TOTAL</b>	<b>28798481.80</b>	<b>25370536.00</b>

As per our separate report of even date.

FOR Kinra & Associates  
CHARTERED ACCOUNTANTS

  
(Gagan Kinra)  
F.C.A., M.Com., LL.B.  
M. No. 425053



FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE

  
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HEAD (P&A)

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Kinra & Associates  
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SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2022  
**SCHEDULE - 8 - GOVERNMENT GRANT RECEIVED**

S.No.	PARTICULARS	CURRENT YEAR	PREVIOUS YEAR
		2021-22	2020-21
1(a)	Government of India - Plan	3490238.00	7107398.00
(b)	Government of India - Plan (Capital a/c)	0.00	0.00
(c)	Swatch Action Plan	2017445.00	2000000.00
2(a)	Government of India through Development Council for Pulp, Paper & Allied Industries-Non Plan	59994102.40	69047970.60
(b)	Core Secretariate for Development Council PP&A Industry	1448108.00	3201443.00
3	Government of India through Development Council for Pulp, Paper & Allied Industries for Cess Projects		
(a)	Continious Education Training of Tech Personal	1129144.00	39769.00
(b)	Development of Protocole	0.00	525129.30
(c)	Statistical Data collection Cell for Indian Pulp & Paper Industry /Cencus survey	1016787.00	824829.00
(d)	Capacity Building and upgradation of infrastructure for inter lab Comparison	0.00	1750000.00
(e)	Creation of Testing Facilities for Food Packaging paper	2023767.00	523602.23
(f)	A Synergistic and Economical Approach for Treatment of Pulp & Paper Mill	383193.00	398830.00
(g)	Screening of Parents for Clonal Forestry & Hybridization for Higher Productivity	353372.00	0.00
(h)	Demonstration of Ozone Treatment Technology	349194.00	25031.00
(i)	Biopolymeric approach for improvement of	371488.00	157710.00
(j)	Study on Delignification of Agro residu	441601.00	1305109.00
(k)	A Review study of ITS-HS classification	60441.00	0.00
(l)	Bacterial cellulose production for Driver	163784.00	0.00
(m)	Land Application of treated effluent.	413348.00	0.00
(n)	Studied on Alternate Auto Causticization	232780.00	0.00
	<b>TOTAL</b>	<b>73888792.40</b>	<b>86906821.13</b>

As per our separate report of even date.

FOR Kinra & Associates  
CHARTERED ACCOUNTANTS

  
(Gagan Kinra)  
F.C.A., M.Com., LLB  
M. No. 425053

PLACE: SAHARANPUR  
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FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE

  
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Kinra & Associates  
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**POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR**  
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2022  
**SCHEDULE - 9 - FEES/SUBSCRIPTION'S**

S.No.	PARTICULARS	CURRENT YEAR 2021-22	PREVIOUS YEAR 2020-21
1	Membership fees	35000.00	65000.00
2	Training fees	195000.00	355105.00
	<b>TOTAL</b>	<b>230000.00</b>	<b>420105.00</b>

As per our separate report of even date:  
FOR Kinra & Associates  
CHARTERED ACCOUNTANTS

  
(Gagan Kinra)  
F.C.A., M.Com., LL.B.  
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FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE

  
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PLACE: SAHARANPUR  
Date: 23-09-2022

**Kinra & Associates**  
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SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2022  
**SCHEDULE - 10 - INTEREST EARNED**

Sl. No.	PARTICULARS	CURRENT YEAR 2021-22	PREVIOUS YEAR 2020-21
	<b>INTEREST EARNED</b>		
1	On Term Deposite with schedule Bank	2963896.87	3463307.00
2	On Loan to staff	73272.00	93926.00
3	Interest on Refund of TDS	0.00	443436.00
	<b>TOTAL</b>	<b>3037168.87</b>	<b>4000669.00</b>

As per our separate report of even date.

FOR Kinra & Associates  
CHARTERED ACCOUNTANTS

  
(Gagan Kinra)  
F.C.A., M.Com., LL.B.  
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PLACE: SAHARANPUR  
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**POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR**  
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2022  
**SCHEDULE - 11 - OTHER INCOME**

Sl.No.	PARTICULARS	CURRENT YEAR 2021-22	PREVIOUS YEAR 2020-21
	<b>OTHER INCOME</b>		
1	Hostel rent	266000.00	252325.00
2	Lease rent	74500.00	62500.00
3	Licence fee	264044.00	278682.00
4	Miscellaneous income	117701.45	121575.40
	<b>TOTAL</b>	<b>722245.45</b>	<b>715082.40</b>

As per our separate report of even date.

FOR Kinra & Associates  
CHARTERED ACCOUNTANTS

  
(Gagan Kinra)  
F.C.A., M.Com., LLB  
M. No. 425053

PLACE: SAHARANPUR  
Date: 23-09-2022

FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE

  
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**Kinra & Associates**  
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Pant Vihar, ITC Road, Saharanpur  
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POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR  
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2022  
**SCHEDULE - 12 - ESTABLISHMENT EXPENSES**

S.No.	PARTICULARS	CURRENT YEAR 2021-22	PREVIOUS YEAR 2020-21
	<b>ESTABLISHMENT EXPENSES</b>		
1	Salary & Allowances	49615186.40	53485706.00
2	CPF Contribution	4513125.00	4492527.00
3	Gratuity Paid	2477977.00	2474298.00
4	Encashment of leave	4900059.00	2354505.00
5	Reimbursement of medical expenses	1241461.00	1587685.00
6	Arrear of Salary	0.00	2808685.00
7	Arrear of CPF Contribution	0.00	321369.00
	<b>TOTAL</b>	<b>62747808.40</b>	<b>67524775.00</b>

As per our separate report of even date.

FOR Kinra & Associates  
CHARTERED ACCOUNTANTS  
  
(Gagan Kinra)  
F.C.A., M.Com., LLB  
M. No. 425053  


FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE



  
DIRECTOR



  
HEAD (F&A)

PLACE: SAHARANPUR  
Date: 23-09-2022



Kinra & Associates Chartered Accountants		H. No. 32, Phase III-B Pant Vihar, ITC Road, Saharanpur Contact - 91- 7906192914	
<b>CENTRAL PULP &amp; PAPER RESEARCH INSTITUTE</b> An autonomous organisation registered under societies Act under the administrative control of the Ministry of Commerce & Industry (Govt. of India) POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2022 SCHEDULE - 13 - ADMINISTRATIVE EXPENSES ETC			
S.No	PARTICULARS	CURRENT YEAR 2021-22	PREVIOUS YEAR 2020-21
	<b>OTHER ADMINISTRATIVE EXPENSES ETC.</b>		
1	To Lab & Plant Maintenance	4045482.00	2869080.23
2	To Cartage & Freight	3350.00	2400.00
3	To Electricity and water	7104081.00	6758000.00
4	To Repair & Maintenance of Assets	11434805.90	9481291.25
5	To Rent & Taxes	952560.00	907200.00
6	To Postage & Telephone & Communication	127159.25	211314.37
7	To Printing & Stationery	829022.00	947527.00
8	To Travelling & Conveyance Exp.	1193604.00	855113.00
9	To Exp. on Seminar & Workshop	5400.00	0.00
10	To Membership subscription	12000.00	5200.00
11	To Audit fees	41500.00	0.00
12	To Hospitality Expenses	52342.00	32939.00
13	To Legal & Professional Exp.	515814.40	249834.00
14	To News Paper Exp.	76720.00	3235.00
15	To Training Expenses	1348536.00	320516.00
16	To Watch & Ward	6840533.00	7281776.00
17	To Bank charges	26436.43	204545.68
18	To Advertisement	24114.00	322284.00
19	To Testing Fee Paid	39800.00	224154.00
20	To Staff Car Maint	822462.00	328428.00
21	To Hindi Diwas Exp.	407592.00	4000.00
22	To Swachh Bharat Abhiyan Exp.	2089998.00	2186093.00
23	To Software Exp. / Expenditure on IT	1133453.00	5132135.00
24	To Paper Ex	19930.00	0.00
25	To Expenditure on NABL	115380.00	0.00
26	To Grant in Aid Paid	300000.00	1678000.00
27	To Honorarium	82300.00	129500.00
28	To National Festival	63140.00	49842.00
29	To Plantation & Gardening / Horticulture	177702.00	161278.00
30	To Interest paid on TDS	0.00	7750.00
31	To Loss in Forex	0.00	2324.48
32	To Bank Interest	0.00	116364.00
33	To loss on TDS	0.00	198673.00
34	To Electrical Consumable	333878.00	0.00
35	To Consultancy Fee Paid	245000.00	0.00
	<b>TOTAL</b>	<b>40462094.98</b>	<b>40668797.01</b>

As per our separate report of even date.  
FOR Kinra & Associates  
CHARTERED ACCOUNTANTS  
  
(Gagan Kinra)  
F. C. A., M. Com., LLB  
M. No. 425053  


FOR CENTRAL PULP & PAPER RESEARCH INSTITUTE  
  
DIRECTOR  
  
HEAD (F&A)

PLACE: SAHARANPUR  
Date: 23-09-2022



**Kinra & Associates**  
Chartered Accountants

**H. No. 32, Phase III-B**  
**Pant Vihar, ITC Road, Saharanpur**  
Contact - 91- 7906192914

**CENTRAL PULP & PAPER RESEARCH INSTITUTE**

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Commerce & Industry (Govt. of India)

POST BOX - 174, PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR (U.P.)

**ANNEXURE**

**Significant Accounting Policies & Notes on Accounts**

Overview:

CPPRI is an autonomous organization registered under the Societies Act under the administrative control of Ministry of Commerce & Industry (Govt. of India) vide Government of India Gazette Notification dated 7.8.1979.

Financial Accounts:

The financial statements are prepared on the basis of historical cost convention and the Accounting Policies used in preparation of these financial statements confirm with the Accounting Principles generally accepted in India. The Institute follows the accrual method of accounting.

**A. Significant Accounting Policies:**

1. Revenue Recognition:

- 1.1 Testing fee is accounted for on accrual basis.
- 1.2 Lease Rent is accounted for on accrual basis.
- 1.3 Government Grant, Institutional fee, Sponsored Project, Membership fee, Training and Registration fees are accounted for on receipt basis.

2. Inventory valuation:

The inventory comprises of stores and spares are valued at cost.

3. Fixed Assets:

Fixed Assets are stated at cost less accumulated depreciation.

4. Depreciation:

4.1 Depreciation is provided on written down value methods, as per the rates specified in the Income Tax Act 1961.

5. Government Grants:

Government Grants received to the extent utilized for capital expenditure being added to the capital fund and to the extent utilized for revenue expenditure being treated as income in the income and expenditure account and the un-utilized grant being carried forward. This is not as per the para no.14 of the Accounting Standard (AS-12) relating to Accounting for Government Grants. The Institute



was advised to consider the guidelines on the subject in consultation with the concerned organizations /agencies for implementation. The Institute in reply has confirmed that other similar organizations / agencies are also following the same pattern. This point was also discussed by the concerned officer in the training imparted by National Institute of Finance Management, Govt. of India during the course of training.

6. Foreign currency transaction:  
Transactions in foreign currency are accounted at the exchange Rate prevailing on the date of transaction in Indian Currency.
  
- B. Notes forming part of Accounts:**
  1. Information about the activities of the Institute:  
The Institute running under the Administrative control of Ministry of Commerce & Industry, Department for Promotion of Industry and Internal Trade (DPIIT), New Delhi is engaged to promote Research and other scientific work connected with Pulp, Paper & Allied Industries to establish and maintain Laboratories, Pilot Plant, and Workshop etc and to edit, print, publish and exhibit books, papers and periodicals bearing upon the said industries. Besides that the Institute also under take Cess funded projects and Sponsored projects from Govt. of India, Government Institutions and other Organizations also.
  
  2. Retirement Benefits:
    - 2.1 Provision for Gratuity payable on death/retirement of employees, during this year is Rs. 2477977.00 and for leave encashment is Rs. 4900059.00 payable to them based on accrual basis and as per the actuarial valuation certificate.
  
  3. Current Assets Loans & Advance:  
Management has stated that the current assets, loans and advances have full value on realization in the ordinary course of Business.
  
  4. Corresponding previous year figures have been re-grouped or re-arranged wherever necessary.
  
  5. Total advances stand as on 31.3.2022 is Rs. 11119393.94 excluding advance to staff relates for advance against supply of equipments etc.
  
  6. As per Schedule No.1 of the Balance-sheet, capital fund shows that Grant of Rs. 10369164.41 has been incurred as capital expenditure while as per Schedule No.5 of the Balance-sheet relating to fixed assets shows an addition of Rs.17252024.73 Regarding more capital expenditure of Rs. 6882860.32 it is stated by the management that it is due to adjustment of suppliers bills and from letter of credits in the current year.



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- 7. The management has confirmed that:
  - 7.1 The provisions of all known income, expenditure and liabilities have been made.
  - 7.2 No contingent liability exist on the date of Balance-sheet.
  - 7.3 No significant event has occurred from the date of Balance-sheet and audit.

For Central Pulp & Paper Research Institute

  
Head (Finance & Accounts)

  
(DIRECTOR)

Date: 23-09-2022  
Place: Saharanpur

For Kinra & Associates  
Chartered Accountants

  
(GAGAN KINRA)  
F.C.A., M.Com (Ed.)  
M. No. 425053





## STAFF LIST

### SCIENTIFIC STAFF

Scientist-F	Dr. Kawaljeet Singh, M.Sc., Ph.D., M.B.A. Dr. A.K. Dixit, M.Sc., Ph.D.
Scientist E-II	Dr. Shivaker Mishra, M.Sc., Ph.D. Dr. Priti Shivhare Lal, M.Sc., Ph.D. Smt. Anuradha V. Janbade, M.Sc. Dr. Nitin Endlay, M.Sc., PGDIPM (PG Diploma in Industrial Pollution Management), Ph.D. Dr. Sanjay Tyagi, B.E, M.E, Ph.D. Accredited Energy Auditor Shri. Alok Kumar Goel, M.Sc., Certified Energy Manager
Scientist E-I	Shri. Satya Dev Negi, M.Sc., PGDPPT (PG Diploma in Pulp & Paper)
Scientist B	Dr. Arvind Kumar Sharma, M.Sc., PGDPPT (PG Diploma in Pulp & Paper) Mohd. Salim, M.Sc. Shri Kumar Anupam, B.Tech, M.Tech. Dr. Shubhang Bhardwaj, B.Tech, M.Tech. Dr. Nitin Kumar, B.Tech, M.Tech, Ph.D. Dr. Jitendra Kumar, M.Sc. Ph.D.

### TECHNICAL & SUPPORT STAFF

Technical Officer E-1	Shri. N.K. Naik, Diploma in Engineering (Industrial Electronics)
Technical Officer-B	Shri Pankaj Kumar Goley, B.Tech.(Electrical Engineering)
Library Officer –B	Smt. Sarita Sharma, M.A., MLISc.
Technical Grade VI	Shri Dushyant Kumar Shri M.L. Semwal (Superannuated on 30.4.2021) Shri Soban Singh Shri Gopal Dutt Shri R.K.Kapoor Shri Sunder Lal (Superannuated on 31.3.2022) Shri Gopal Singh
Driver	Shri Shri Bhagwan Sharma (Superannuated on 31.8.2021)

### ADMINISTRATIVE AND FINANCE STAFF

Director	Dr. M.K. Gupta, M.Sc., Ph.D.
Section Officer	Shri O.P. Bhatia, B.Com (Hons)(Superannuated on 31.3.2022)
Section Officer	Shri H. C. Pandey, M.Com



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**Technical Review**

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For further information please contact

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