



*A View of CPPRI Library*

**Editorial Advisor**  
**Dr. R. M. Mathur**

**Editor-in-Chief**  
**Dr. R. K. Jain**

**Editorial Board**  
**Dr. R. D. Godiyal**  
**Dr. Shivaker Mishra**  
**Ms. A. V. Janbade**  
**Ms. Sarita Sharma**

**Vol.24, No.2-3, Apr. - Sep. 2012**  
**News Bulletin on Pulp & Paper**  
**Research and Development**  
(For Private Circulation)

## Inside

Management News	2
Research Activities	4
Technical/Consultancy Services	10
Workshop/Seminar/Training	12
Lectures and Presentations	14
Reports and Publications	15
Interaction with Industry	15
Visitors	18
M.Sc. Programme	19
World Environment Day	20
New Membership	21
Industry News	21
राजभाषा हिन्दी सप्ताह	22
स्वतंत्रता दिवस	23
कर्मचारी समाचार	23



# Central Pulp & Paper Research Institute

केन्द्रीय लुग्दी एवं कागज़ अनुसंधान संस्थान, सहारनपुर

## MANAGEMENT NEWS

### Appointment of President, Council of Association (CoA) of CPPRI

It gives CPPRI immense pleasure and honour on joining of Shri Saurabh Chandra, IAS as Secretary to the Govt. of India, Department of Industrial Policy & Promotion, Ministry of Commerce and Industry, Govt. of India. Shri Saurabh Chandra will also adorn the chair of President, Council of Association of CPPRI.



**MR. SAURABH CHANDRA, IAS**

*Secretary to the Govt. of India, Dept. of Industrial Policy & Promotion (DIPP), Ministry of Commerce & Industry.*

Mr. Saurabh Chandra, IAS aged 56 years, an officer of the Indian Administrative Service, belonging to the 1978 Batch is a graduate in Electrical Engineering from the Indian Institute of Technology, Kanpur (First Class with Distinction) with a Diploma in Management. He served the nation in different capacities in the State of Uttar Pradesh (U.P.) between 1979-93, namely, as Assistant Magistrate in the districts of Bijnor and Unnao before moving on to a stint in the UP Secretariat in the Department of Finance. Thereafter, he was posted as Collector and Magistrate, Banda District, Administrator of Agra Municipal Corporation with concurrent charge of Vice Chairman of Agra Development Authority; Managing Director of Uttar Pradesh Small Industries Corporation (UPSIC) and Collector and Magistrate of Varanasi District. As Managing Director of UPSIC, he was instrumental in turning it around. Thereafter, he proceeded on deputation as Director in the Department of Fertilizers, Ministry of Chemicals and Fertilizers,

Government of India. During this posting, he served at different times, as a Government Nominee Director on the Boards of Madras Fertilizers Limited, Fertilizers and Chemicals Travancore Limited and Hindustan Fertilizers Corporation Limited. During this tenure he was also associated with setting up of Oman India Fertilizer Project, one of the most successful overseas Joint Venture Project set up by a Central Public Sector Enterprise/Multi-State Cooperative. After completion of his deputation, he worked as Divisional Commissioner of Varanasi Division and Lucknow Division respectively and as Secretary, Department of Irrigation, Government of Uttar Pradesh. Subsequently, he proceeded on deputation to the Government of India, where he served as Joint Secretary in the Departments of Revenue and Disinvestment, Ministry of Finance. In the Department of Disinvestment, he handled policy-related matters and was associated with the IPO of Power Grid Corporation of India Limited. On returning from deputation, Mr. Chandra worked as Principal Secretary in the Departments of Tourism, Science and Technology and Rural Engineering Services in the State Government. From February 2009 to April 17, 2012 he was posted as Additional Secretary and Financial Adviser in the Ministry of Commerce and Industry, Department of Industrial Policy and Promotion, Govt. of India, with additional charge of Financial Adviser to the Department of Heavy Industries. He is currently on the Board of HMT Limited and HEC Limited, Ranchi. He assumed the charge of Secretary in the Ministry of Commerce and Industry, Department of Industrial Policy and Promotion. Mr. Chandra has been conferred numerous awards during his service period, some of which are mentioned below:-

- a) In recognition of the outstanding zeal and high quality of service rendered by him during 1991 Census of India, the President of India was pleased to confer upon him the 1991 Census Silver Medal.

- b) The Government of UP conferred him the State Award for Outstanding and praiseworthy services rendered during 1990-91.
- c) The Government of UP gave him a 'Letter of Commendation' for successfully implementing Priority Development Programmes and 20 Point Programme of the State Government for the period 2001-02.

Central Pulp & Paper Research Institute (CPPRI) is privileged to have a highly distinguished IAS Officer as the President of its Council of Association, and the Institute will attain new dimensions under his kind guidance and dynamic leadership.

### Council of Association (CoA) Meeting of CPPRI

The 43<sup>rd</sup> meeting of Council of Association (CoA) of CPPRI was held on June 19, 2012 at Udyog Bhavan, New Delhi. The meeting was chaired by Shri Saurabh Chandra, IAS, Secretary, IPP, Ministry of Commerce and Industry, Govt. of India and President, Council of Association of CPPRI. The meeting was attended by Shri Talleen Kumar, IAS, Joint Secretary, IPP, Shri Mukul Ratra, Director (IF-Wing-IPP), Smt. Sunita Yadav, Deputy Secretary IPP, Dr. Sanjay Naithani, Scientist-F & Head (C& P Branch)-Representative of DG, ICFRE, Shri Pramod Agarwal, President, IARPMMA & CMD, Rama Paper Mills Ltd., Shri R. C. Rastogi, President, IRPMA & CMD, Khatema Fibres Ltd., Shri Madhukar Mishra, President, IPMA & MD, Star Paper Mills Ltd., Shri Anil Kumar, Executive Director & CEO, Shreyans Industries Ltd., Shri C. S. Panigrahi, President, Voith Paper Technology (India), Ltd., Dr. R. M. Mathur, Director CPPRI and senior scientist from CPPRI.

### Meeting of Research Advisory Committee (RAC)

A meeting of Research Advisory Committee (RAC) was held on August 8, 2012 at DIPP, New Delhi. The meeting was chaired by Sh. Talleen Kumar, IAS, Joint Secretary, Ministry of Commerce and

Industry, DIPP & reviewed the progress of completed XI RAC Plan Scheme of CPPRI.



*Sh. Talleen Kumar, IAS, Joint Secretary, Ministry of Commerce and Industry, DIPP and Dr. R.M. Mathur, Director CPPRI during the RAC meeting at New Delhi*

### Meeting of Development Council for Pulp, Paper and Allied Industries (DCPPAI)

The first meeting of the Reconstituted Development Council for Pulp, Paper & Allied Industries (DCPPAI) was held under Chairmanship of Shri Harsh Pati Singhania, M.D. J. K. Papers Ltd., on July 27, 2012 at Udyog Bhawan, New Delhi.



*Shri Harsh Pati Singhania and Dr. R.M. Mathur, Director CPPRI during the meeting with other Ministry officials*



The participants of the meeting were Shri Mukul Ratra, Director (IF Wing), DIPP, Mrs. Sunita Yadav, Dy. Secretary, DIPP, Dr. R. M. Mathur, Director CPPRI & Member Secretary and members from Development Council on Pulp, Paper and Allied Industries, as well as special invitees from DIPP, IARPMA, INMA, AIFMP and senior scientists from CPPRI. During the meeting various issues related to Indian Pulp and Paper Industry, follow up action on the decisions of the last meeting, status of Cess Funded Projects & reconstitution of new Cess Committee were discussed.

## RESEARCH AND DEVELOPMENT ACTIVITIES

### RAC Projects

#### Raw Material and Product Development

##### New Approach in Processing and Paper Making of Recycled Fibre to Improve the Quality of End Product

Literature survey is being conducted on wet end additive to improve the quality of packaging paper. Preliminary studies were initiated to study the effect of refining at different freeness levels to improve the strength of packaging grade paper in terms of fiber strength and fiber bonding.

#### Energy Conservation and Environmental Management

##### Incremental Capacity Enhancement & Improved Efficiency of Conventional Recovery System in Wood and Non-Wood Based Paper Mills.

Activities were initiated with detailed literature survey & dialogue with various paper mills to chalk-out detailed work plan.

##### Implementation of Enzyme Application in Pulp and Paper Industry

The project objective is to implement the biotechnological applications in Pulp & Paper Industry to pursue the clean & green technology to address the issues related to energy conservation, quality up-gradation and environmental

improvement. Following activities have been initiated:-

- ♦ **Bio-ethanol Production from Lignocellulosic Biomass, Bagasse Pith and Rice Straw**

Current literature survey related to identified lignocellulosic biomass viz. bagasse pith and rice straw for bio-ethanol production is being conducted. Collection of raw materials and its chemical characterization are initiated.

- ♦ **Development of Indigenous Capabilities for Production of Various Enzymes and Implementation of Bio-refining and Bio-deinking in Indian Paper Industry**

Studies on isolation and screening of microorganisms capable of producing desired enzymes viz. cellulase / Xylanase / amylase etc. were initiated. Further studies on bio-refining of old news print have been started.

- ♦ **Bio-remediation of Paper Mill Effluent**

Current literature survey are continued for bio-remediation experiments of paper mill effluent. Further, isolation of microbial strains from effluent and sludge are under progress in order to find the effective strains for effluent treatment.

##### Water Conservation in Pulp and Paper Industry through Application of Kidney Technology

The project was initiated with a detailed literature survey on various aspects of water conservation viz , water quality tolerance limits in various process operations , optimum water requirement in different process operations, water conservation technologies and strategies being adopted by Pulp and Paper Mills at National and International level etc.

Further interaction with selected mills in different product categories for their participation in the project is under progress.

A preliminary mill visit to a waste paper based kraft paper mill was carried out to study the problems due to build-up of salts, inorganic and organic matter in the loop as a result of recycling and reuse of recycled treated waste water having achieved nearly zero discharge.

A comparative characterization of mill effluent of RCF based mills producing various grades of paper like newsprint, duplex board and kraft paper to evaluate the treatment options for making it suitable for reuse / recycle into the process is under progress.

## **Infrastructure Development and Capacity Building Activities**

### **Strengthening of Training and Human Resource Development (HRD) Infrastructure in Pulp, Paper and Allied Industries**

Following participants were trained in different areas as part of the project activities:

#### **Pulp & Paper Manufacturing**

- ♦ Mr. Vikram Rawal, Mr. Ankit Baliyan, Ms. Rajopriya Goswami, Mr. Manish, Mr. Amit, Ms. Tanya and Ms. Pratibha Singh B.Sc. Student from Sam Higginbottom Institute of Agriculture Science and Technology, Allahabad (U.P.) were imparted training from May 30 to June 30, 2012.
- ♦ Ms. Pratibha Singh (B.Tech Student) from Banaras Hindu University, Varanasi (U.P.) was imparted training from May 30 to June 30, 2012.
- ♦ Ms. Priya Aggarwal B.Tech Student of Banasthali University, Jaipur (Rajasthan) was imparted training from July, 10 to Nov 10, 2012.

#### **Environment Management**

- ♦ Mr. Nitin Mishra (M.Tech - Chemical) from Kurukshetra University (Haryana) was imparted training from July 1, 2012 to August 31, 2012.

## **CESS Funded Projects**

### **An Integrated Approach for Utilization of Bagasse Pith for Production of Bio-ethanol and Value Added Lignin Products (CPPRI/IIP, Dehradun)**

The objective of the project aims efficient utilization of bagasse pith through development of a process for production of bio-ethanol and value added chemicals adopting a bio-refining approach. During the period, studies were continued with optimization of the process conditions for

prehydrolysis of bagasse pith followed by enzymatic saccharification of prehydrolysed pith under optimized doses of identified commercial enzymes (Cellulase +  $\alpha$ -glucosidase) to recover maximum amount of fermentable sugars for efficient conversion into ethanol & value added chemicals. Encouraging results could be achieved in respect of pretreatment and saccharification efficiency wherein it could be possible to recover more than 85% of hemicellulose (xylose) & glucose respectively. After enzymatic saccharification of the pretreated biomass under optimized treatment conditions, it was possible to achieve total sugar concentration of more than 40 g/l containing more than 30 g/l of glucose which could be converted into ethanol with fermentation process using the identified thermophilic microbial strain.

Proximate chemical analysis of residual biomass of each stage after prehydrolysis and enzymatic saccharification was done for different parameters like Klason lignin, pentosan, holocellulose and ash, which has indicated that lignin rich biomass obtained after saccharification of cellulose could find various industrial application as value added products.

Studies on conversion of xylose sugars to furfuryl were continued and the results showed upto 50% conversion efficiency. Further studies to improve the conversion rate are under progress. A joint patent of the developed process was filed by CPPRI and IIP-CSIR.

### **Development of Environmentally Safe Biological Process to Bleach the Bamboo and Wood Pulp using Potential Bacteria (CPPRI/IGIB, New Delhi)**

The aim of the project is to develop the environmental friendly bleaching process for bio-bleaching of wood pulps using ligninolytic bacteria for the reduction in the demand of chlorinated bleaching chemicals and improvement in pulp quality.

Studies on isolation of lignolytic bacteria were initiated by IGIB. Exhaustive studies on the pulp

treatment with developed bacteria followed by alkali extraction of the unbleached hardwood pulp showed gain in the 6-8 unit brightness value when compared to the untreated pulp. Studies are continued to develop the bacterial treatment process to bleach the pulp and to explore possibility of elimination of DO stage, alternate to the stage of the conventional bleaching process.

#### **Fibre Modification of Enzymes (CPPRI/TCIRD/IPMA)**

The objective of the project is development of enzyme refining technology for recycled pulps to improve the pulp quality, drainability and to reduce the refining energy. Studies on enzymatic refining of recycled pulp (OCC and NDLKC) were conducted with two commercial cellulase enzymes. Studies on optimisation of process conditions like treatment time and enzyme dose were conducted with the identified enzymes to improve the pulp quality by reducing refining energy if any. Results were encouraging & indicated the possibilities for elimination of the use of caustic soda pulping of OCC/NDLKC/CC and reduction in consumption of energy during refining of pulps without chemicals and better strength properties of pulp.

#### **Continuing Education (Training Programme) for Technical Personnel in Pulp and Paper Industry (CPPRI)**

The activities of this two year project were taken up at the instance of CESS Committee of CPPRI with the objective to update the knowledge of technical personnel of Indian Paper Industry which will enable them to utilize the resources equipment and unit processes to the optimum level.

Prior to this two year project Institute has successfully organized eight CESS training programmes for technical personnel of Pulp Paper & Allied Industries during 2002-2010. Four training programmes have been planned to be organized as part of this two year project. Main thrust areas are energy, environment, chemical recovery, utilization of recycled fibre etc.

#### **9th CESS Training Programme - Chemical Recovery and Environmental Management**

9th CESS training programme was conducted on "Chemical Recovery and Environmental Management" from August 22-23, 2012 at CPPRI, Saharanpur (U.P.). The programme was organized for middle management, R&D and process personnel engaged in the Pulp, Paper and Allied Industries. Forty eight technical personnel including fourteen students of M.Sc. (Pulp and Paper) -II Year participated in this training programme and were imparted training on different aspects of chemical recovery and pollution control strategies.



*Participants of 9th CESS Training Programme with Dr. R.M. Mathur, Director, CPPRI, Dr. K. Raghvan, CEO Agro Pulping Machinery (P) Ltd. and Senior Scientists of CPPRI.*



*Dr. R.M. Mathur, Director CPPRI distributing the Certificates to the participants during 9th CESS Training Programme.*

#### **Sponsored Projects**

#### **Preparation of Charter for Water Recycling and Pollution Prevention and Detailed Implementation**



### **Programme for Pulp and Paper Industries in River Ganga Basin - Sponsored by CPCB, Delhi**

As a follow-up of the CPCB sponsored project Techno-economic Feasibility for Setting up of Common Chemical Recovery Plant (CCRP) and Common Effluent Treatment Plant (CETP) for Pulp & Paper Industries Operating in Identified Cluster of Uttar Pradesh and Uttarakhand. CPPRI assisted CPCB in preparation of Charter for Water Recycling & Pollution Prevention in Pulp & Paper Industries in Ganga River Basin including detailed programme for implementation of charter.

Further, CPPRI has been engaged by CPCB as a third party to facilitate Industry as well as regulatory authorities (CPCB/ SPCBs) in implementation of the Charter and monitoring & surveillance.

### **Studies on Deinking of Currency Brokes - Sponsored by M/s Security Paper Mills, Hosangabad, M.P.**

The objective of the project is to develop a process technology for Deinking of currency broke/cutting so that it could be effectively recycled. Optimaziation of process variables for repulping of currency broke is in progress.

### **Pre-feasibility Studies on AKD Sizing of Cotton/Linter Pulp - Sponsored by M/s Security Paper Mills, Hosangabad, M.P.**

Studies were carried out to optimize the AKD sizing. After sizing, the paper handsheets were evaluated for absorption, strength & optical properties. Further work is in progress.

### **Enzymatic Refining of Cotton Comber and Linter Pulps - Sponsored by M/s Security Paper Mill, Hoshangabad, M.P.**

The objective of the project is to explore enzymatic refining process for cotton comber and linter pulps to improve the pulp quality, drainability and to reduce energy during refining. Two identified enzymes procured from a leading enzyme manufacturing company were used for the study. Studies on enzymatic treatment of cotton comber followed by beating showed encouraging results

and indicated the potential to reduce the energy (15-20%) consumed during refining of enzymatically treated pulps with improved drainability (30%) and strength properties of fibre in respect of tensile index and double fold etc. The findings were further supported by photo micrographs which confirmed that the enhancement in the quality of paper was due to better fibrillation after enzymatic refining. Further studies are continued.

### **Improved Energy Efficiency Through Utilization of Lignin Based Biomass from Agro Based Paper Mills - Sponsored by PCRA, New Delhi**

Lignin removal studies were conducted at M/s Madhya Bharat Paper Mills Ltd. Rice straw was separated, washed and purified for better quality of the product. After optimization of the process conditions of the lignin removal plant, the lignin biomass thus obtained was further brought to technology promoters site and value added products were prepared. Studies for its evaluation and utilization in plywood/construction industry and paper mills were continued.

### **Technological Improvement of a Process of Biological Reduction of AOX, Colour, COD and BOD of Waste Water Emanated from Large Pulp and Paper Industries. (CPPRI/IGIB, Star Paper Mills Ltd., - Sponsored by Department of Biotechnology, New Delhi)**

After successful completion of the phase - I activities of pilot trial at M/s Star Paper Mill, Saharanpur, DBT has extended the project activity for up-scaling the process on continuous basis at M/s Star Paper Mill, Saharanpur as phase - II of the project.

Microbial consortia were prepared in large scale by IGIB as starter inoculum for continuous operation of the pilot plant trail at Star Paper Mill. Analysis of effluents of the mill existing treatment process has done on regular basis to analyse the pollution loads of the mill effluents without developed bacterial treatment.

After 2 months of effluent analysis on daily basis, developed microbial consortia were inoculated in

pilot plant. After 2-3 days of acclimatization period, effluent samples were collected from various stages like PC outlet, SC outlet, aeration basin of mill and treated effluent from pilot plant which were analysed for their pollution loads like colour, lignin, COD, BOD, pH and aerated effluent characteristics like MLSS, dissolved oxygen and SVI.

Results are encouraging in respect of reduction in pollution loads and recorded reduction upto 40-50% Colour, 30- 40% lignin and 60- 70% COD at very low MLSS (800-1200 mg/lit).

#### **Enzymatic Refining of Bamboo Pulps - Sponsored by HPC, Kolkata**

Biorefining experiments of Bamboo pulp were conducted with identified commercial Cellulase enzymes. Bamboo pulps were received from two pulp and paper mills (Nagaon and Cachar) of Hindustan Paper Mills Ltd. Optimization of enzyme dose were carried out with both pulps in respect of energy saving and refining efficiency. Results were encouraging in respect of improvement in strength properties with reduction in refining energy and refining efficacy enzyme treated pulps. Interim report of the study was submitted to mill.

#### **Utilization of Jute for Paper Making - Sponsored by JCI, Kolkata**

Under this JCI sponsored project pilot plant studies were completed and based on the successful studies a commercial scale demonstration is being planned.

#### **Exploration of Jute as a Source of Fibrous Raw Material for Indian Paper Industry - Sponsored by National Jute Board, Kolkata.**

Pilot scale studies were conducted on Jute for production of paper. Various grades of pulp were produced. Results were encouraging. Studies are being up-scaled on commercial scale.

#### **Review and Validation the Baseline Energy Audit (BEA) reports for all designated Consumers belonging to Pulp and Paper Sector - Sponsored by EESL, New Delhi**

A project has been awarded to CPPRI by Energy Efficiency Services Limited (EESL), Ministry of

Power, Govt. of India, New Delhi with the objective to :-

- ♦ Technically review the BEA report of each DC belonging to Pulp and Paper Sector in accordance with the requirement of EESL
- ♦ Check each report of completeness of technical data and sufficiency of other essential information as desired in accordance with the sector specific format issued, pre - audit to each of these auditing agencies and in accordance with the requirements of checklist provided.
- ♦ Prepare and submit to EESL a consolidated sector specific report enlisting observations over the shortcomings within each BEA report pertaining to Pulp and Paper Sector, assessment of potential energy savings indicated in these reports etc.

Activities have been initiated accordingly.

#### **Indexing, Digital Abstracting & Digitization of IPPTA Articles/Publications - Sponsored by IPPTA, Saharanpur**

A project was awarded by IPPTA, Saharanpur to CPPRI for developing the online e-library of the articles & papers published in IPPTA Journal since its inception. The cost of the project for developing online e-library is Rs. 8.5 lakhs and project will be completed in January, 2014.

#### **Overseas Projects**

##### **Laboratory and Pilot Scale Pulping and Bleaching Trials of Canadian Wheat Straw- Sponsored by Prairie Pulp and Paper Inc., Canada**

The objective of the project was to study the pulp and papermaking potential of Canadian wheat straw. The study was carried out in two phases. In the first phase the laboratory studies on pulping and bleaching optimization was carried out to achieve bleached pulp of above 85% ISO brightness. In second phase 350 kg OD bleached pulp having brightness 86.5% ISO was successfully produced in the pilot plant of the Institute under laboratory optimized conditions. Laboratory results were exactly translated at pilot scale .



The complete project work was compiled in the following five different reports and submitted to Prairie Pulp & Paper Inc Canada:-

- ♦ Lab Trials of Optimizing Pulping and Bleaching Conditions.
- ♦ Pilot Trial of Pulping & Bleaching for Canadian Wheat Straw.
- ♦ TCF Bleaching of Wheat Straw and Co-Bleaching with Mechanical Flax Pulp Study.
- ♦ Analysis of Effluent Generated During Laboratory and Pilot Scale Bleaching of Wheat Straw Pulp.
- ♦ Black Liquor Characterization and Desilication Trials.



*Mr. Jeff, Mr. Keith, Mr. Wade & Dr. Priti S. Lal Sc. 'E-I' & Mr. Arvind Sharma, SSA observing the final bleached pulp of Canadian Wheat Straw*



*Mr. Keith and Mr. Wade Chute, Alberta Research Council Canada in discussion with Dr. Priti S. Lal, Sc. 'E-I'*



*Pilot scale washing of bleached Pulp of Canadian wheat straw in progress*

## Mill Sponsored Projects

Following projects were taken up at the instance of various Pulp, Paper and Allied Industries :-

S.No.	Consultancy Services / Technical Assistance	Sponsoring Agency
1.	Feasibility of Jute (Core) for Pulp and Paper Production Sponsored by JCI, Kolkatta	Jute Corporation of India, Kolkatta (West Bengal)
2.	Evaluation of Australian Bagasse for Pulp and Paper Making and its Comparison with Indian Bagasse	Queensland University of Technology, (Australia)
3	Quality of Bagasse after Fire Incident	KR Pulp and Papers Ltd., Jalalbad Road, Shahjahanpur (U.P.)
4	Technical Assistance to Hindustan Paper Corporation Ltd.	HPC - Kolkata
5	Pulping and Bleaching Optimization of Bamboo Raw Material	Nagaon Paper Mill (HPC Ltd.), Jagi Road (Assam)
6	Identify Reasons for Low Productivity & Suggest Measures for Improved Productivity of Cachar Paper Mill of HPC Ltd.	Cachar Paper Mill (HPC Ltd.) Distt. Hailakandi (Assam)
7	Identify Reasons for Low Productivity & Suggest Measures for Improved Productivity of Nagaon Paper Mill of HPC Ltd	Nagaon Paper Mill (HPC Ltd.), Jagi Road (Assam)
8	Studies on Improving Performance of Chemical Recovery System.	Century Pulp and Paper, Lalkuan (Uttarakhand)

## TECHNICAL / CONSULTANCY SERVICES

Following Consultancy / Technical services were provided to various Paper & Allied Industries for the period April to September, 2012 by the Institute. Details are as under:

- ♦ 1811 Nos. sample of Paper and Paperboard were tested for optical, physical and morphological properties by Paper Testing Laboratory.
- ♦ 69 Nos. Sample of raw material were analyzed for moisture content and proximate chemical analysis.
- ♦ 3 Nos. Sample of white liquor were analyzed for active alkali and sulphidity.
- ♦ 3 Nos. Sample of unbleached pulp were analyzed for soda loss.
- ♦ Technical services were carried out for testing of scrap paper (SMK) brown grade sample for M/s VLS Fibre, Chennai.
- ♦ Repulpability test of a paper adhesive tape (F198RP Batch no.31311) as TAPPI standard UM 213 method for M/s Intek Tapes Pvt. Ltd., Bangalore.
- ♦ Report on quality improvement of writing/printing grade of paper with different types of filler and their combination for M/s Ruchira Paper Ltd., Sirmor (H.P.).
- ♦ Repulpability test of a paper adhesive tape (F198RP Batch no.31185) as TAPPI standard UM 213 method for M/s Intek Tapes Pvt. Ltd., Bangalore.
- ♦ Fibre classification of moulded tray sample for M/s Claridge Moulded Fibre Ltd., Solan (H.P.).
- ♦ Stickies evaluation for M/s Emami Paper Mills Ltd., Balasore, Orissa.
- ♦ Testing of repulpability of PVDC coated paper for M/s Solvay Specialities India Pvt. Ltd., Mumbai.
- ♦ Testing of IR and LIB kraft pulp sample for M/s VLS Fibre, Chennai.
- ♦ Testing of pulp sample for fibre classification for M/s Insignia Projects Eco Packaging Solutions Pulp Molded Products, Chandigarh.
- ♦ Testing of wet strength of paper by addition of Polyamide resin (Epi Cholrohydrin Base) for M/s Shree Vishnu Chemicals, Surat.76
- ♦ One enzyme sample received from Emami paper mill, Orissa was evaluated for Cellulase activity (CMCase and FPase) and its use in recycle paper deinking.
- ♦ One enzyme sample received from M/s Rosaari Biotech Ltd., was evaluated for xylanase activity.
- ♦ 151 Nos. sample of black liquor, lime mud and scales were analyzed for Na, Fe, Ca, Mg, K, Lignin and C, H, N and S elements.
- ♦ Technical services were rendered to the following mills and organizations by analyzing their effluents / solid waste samples or carrying out air monitoring studies for various pollution parameters:
  - 1) M/s Star Paper Mills Ltd., Saharanpur, U.P.
  - 2) M/s Century Pulp & Paper Ltd., Lalkuan, Uttrakhand
  - 3) M/s Bharat Starch Industries, Yamunanagar, Haryana
  - 4) M/s Bilt Unit Shree Gopal, Yamunanagar, Haryana
  - 5) M/s Naini Papers Ltd., Kashipur, Uttrakhand
  - 6) M/s JK Paper Ltd., Rayagada, Orissa
  - 7) M/s Gangotri Paper Mills Pvt. Ltd., Narsan Kalan, Uttrakhand
  - 8) M/s Magnum Ventures Ltd., Ghaziabad, U.P.
  - 9) M/s Devpriya Papers Pvt. Ltd., Meerut, U.P.

- 10) M/s Devpriya Products Ltd., Meerut
  - 11) M/s Rayana Paper Board Ltd., Khalilabad, U.P.
  - 12) M/s Pudumjee Pulp & Papers Mill Ltd., Pune, Maharashtra
  - 13) M/s Goraya Straw Board Mills Pvt. Ltd., Kashipur, Uttarakhand
  - 14) M/s The West Coast Papers Ltd., Dandeli, Karnataka
  - 15) M/s Shree Shyam Paper & Board Ltd., Kashipur, Uttarakhand
  - 16) M/s DCRTPP, Yamunanagar, Haryana
  - 17) M/s Sainsons Paper Ltd., Pehowa, Haryana
  - 18) M/s Glocal University, Saharanpur, U.P.
  - 19) M/s Garg Duplex & Paper Mills (P) Ltd., Muzaffarnagar, U.P.
- ◆ NCG / Odorous Emission Monitoring provided to M/s Kuantum Papers Ltd., Sailakhurd, Punjab
  - ◆ ETP Performance Evaluation provided to M/s Gangotri Paper Mills Ltd., Muzaffarnagar, U.P. and M/s Garg Duplex Ltd., Muzaffarnagar, U.P.
  - ◆ ETP Adequacy Assessment provided to M/s Magnum Ventures Ltd., Ghaziabad, U.P. and M/s Sandeep Papers Ltd., Noida, U.P.
  - ◆ ETP Up-gradation provided to M/s Pragati Paper Mills Ltd., Ambala, Haryana.
  - ◆ Water Audit / Water Flowmeter Calibration provided to following mills-
    1. M/s Magnum Ventures Ltd., Ghaziabad, U.P.
    2. M/s Emami Paper Mills Ltd., Balasore, Orissa.
    3. M/s The West Coast Paper Mill Ltd., Dandeli, Karnataka.

- ◆ Training in Waste Water Analysis provided to M/s Devpriya Paper Products Ltd., Meerut, U.P.

## REPRESENTATION IN COMMITTEES /PANEL

Dr. R.M. Mathur	Chairman - ETP Adequacy Report Evaluation Committee.
Dr. R. K. Jain	Member-Technical Committee on finalization of ADB Cluster for Handmade Paper Industry, Khadi & Village Industries Commission, Mumbai
Dr. R.K. Jain & Dr. M. K. Gupta	Member-Technical Committee constituted by DIPP, Ministry of Commerce & Industry for inspection/verification of plant & machinery at Cent Ply Pvt Ltd, Palsah tari, Kamrup District, Assam and preparation of the inspection and assessment report related to subsidy claim of the mill under Central Capital Investment Subsidy Scheme 2007.
Dr. S. Panwar	Member - ETP Adequacy Report Evaluation Committee
Dr. S. Panwar	Ph.D Examiner - FRI University, Dehradun
Dr. Nitin Endlay	Ph.D Examiner - University of Petroleum & Energy Studies, Dehradun



## WORKSHOP/SEMINAR/ MEETINGS

### Workshop /Conference/Seminar

- Dr. R. M Mathur, Director CPPRI chaired the technical session entitled "Processing of Recycled and Agro Based Pulps" on July 20, 2012 during IPPTA Zonal Seminar on "Agro and Recycled Fiber Pulping, Bleaching and Paper & Board Making" held at Chandigarh (UT) on July 19-20, 2012. Dr. Vimlesh Bist, Sc. F & Shri Arvind Kumar Sharma, SSA also attended IPPTA Seminar.



*Dr. R.M. Mathur Director, CPPRI Chairing the Technical Session during IPPTA Zonal Seminar at Chandigarh (UT) on July 20, 2012*

Dr. B.P. Thapliyal, Sc. 'E-II' attended following Technical Conferences/Seminars :-

- Paper Tech 2012 organised Jointly by IPMA & CII at Hyderabad in June 2012 as Expert Penalist on PAT.
- IPPTA Zonal Seminar in Chandigarh in July 19-20, 2012.

### Meetings

- Dr. R.M. Mathur, Director, Dr. S. Panwar, Sc. 'F', Dr. M. K. Gupta, Sc. 'E-II' Dr. S. Mishra, Sc.'E-I' and Dr. Nitin Endlay, 'E-I' attended a meeting with CPCB officials and representatives of Pulp and Paper Mills of Kashipur, Meerut, Muzaffarnagar and

Moradabad Cluster at CPPRI on April 17, 2012 to discuss the Charter for Water Recycling and Pollution Prevention in Pulp and Paper Industries in Ganga River Basin and finalise the time frame and targets indicated in the Charter.



*Meeting on Finalisation of Charter on Water Recycling and Pollution Prevention in Pulp & Paper Industries in River Ganga Basin*

- Dr. R. M. Mathur, Director, Dr. S. Panwar, Sc. 'F' and Dr. Nitin Endlay, Sc. 'E-I' attended meeting on Detailed Implementation Programme of Charter for Water Recycling and Pollution Prevention in Pulp and Paper Industries in Ganga River Basin held at CPCB on April 25, 2012.
- Dr. R. M. Mathur, Director and Dr. S. Panwar, Sc. 'F' attended a meeting on finalisation of Detailed Implementation Programme of Charter for Water Recycling and Pollution Prevention in Pulp & Paper Industries in Ganga River Basin at CPCB on June 29, 2012.
- Dr. Vimlesh Bist, Sc. 'F', Dr. R. K. Jain, Sc. 'F', Dr. Suresh Panwar, Sc. 'F', Dr. B. P. Thapliyal, Sc. 'E-II', Dr. Kawaljeet Singh, Sc. 'E-I' and Dr. R. D. Godiyal, Sc.'E-I' attended CoA meeting on June 19, 2012, Udyog Bhawan, New Delhi.
- Dr. Vimlesh Bist, Sc. 'F', Dr. R. K. Jain, Sc. 'F', Mrs. Rita Tandon, Sc. 'F', Dr. Suresh Panwar, Sc. 'F', Dr. B. P. Thapliyal, Sc. 'E-II', Dr. M. K. Gupta, Sc. 'E-II', Dr. Kawaljeet Singh, Sc. 'E-I', Dr. R. D. Godiyal, Sc. 'E-I' and Mr. Satya Dev Negi, Sc. 'B'

attended RAC meeting on August 8, 2012 at DIPP, Udyog Bhawan, New Delhi.

- ♦ Dr. Vimlesh Bist, Sc. 'F' and Dr. R. K. Jain, Sc. 'F' attended meeting in office of the Jute Commissioner, National Jute Board, Kolkata, (West Bengal) on September 06, 2012 to review the progress of the sponsored project on "Utilization of Jute waste (Core & caddies) in Indian paper Industry". The project was entrusted to CPPRI by the National Jute Board, Kolkatta (West Bengal)
- ♦ Dr. Vimlesh Bist, Sc. 'F', Dr. R. K. Jain, Sc. 'F', Mrs. Rita Tandon, Sc. 'F', Dr. A. K. Dixit, Sc. 'E-I' and Shri Satyadev Negi, Sc. 'B' attended meetings at Nagaon Paper Mill, Jagi Road (Assam) & Cachar Paper Mill, Hailakandi (Assam) from July 29 - 31, 2012 to identify reasons for low productivity & suggest measures for improved productivity at these two units of HPC Ltd.. Samples were collected from various sections of Pulp mill from Cachar Paper Mill and Nagaon Paper Mill for detailed studies at CPPRI.
- ♦ Dr. R. K. Jain Sc. 'F' participated in a meeting at KVIC, State Office, Ambala chaired by Shri Karnail Singh, State Director regarding project sponsored to CPPRI on utilization of straw as source of raw material for handmade and products on July 20, 2012.
- ♦ Dr. R. K. Jain, Sc. 'F' participated in the meeting on Finalization of the ADB cluster at Departmental Training Unit of KVIB, Kalighat, Kalpi on April 16, 2012.
- ♦ Dr. R. K. Jain, Sc. 'F' attended the meeting of the Governing Council of Kumarappa National Handmade Paper Institute (KNHPI), Jaipur held at HMPFI-KVIC, Mumbai on April 21, 2012.
- ♦ Dr. R. K. Jain, Sc. 'F' and Dr. A. K. Dixit, Sc. 'E-I' visited PCRA for meeting on sponsored project.
- ♦ Dr. S. Panwar, Sc. 'F', Dr. M. K. Gupta, Sc. 'E-II' and Dr. Nitin Endlay, Sc. 'E-I' attended the

meeting of Report Evaluation Committee chaired by Dr. R. M. Mathur, Director CPPRI and held at CPPRI on September 19, 2012.



*Meeting of Experts for Evaluation of ETP Adequacy under Charter for Water Recycling & Pollution Prevention for Pulp & Paper Industries in River Ganga Basin*

- ♦ Dr. B. P. Thapliyal, Sc. 'E-II' attended following meetings during the period April-Sept. 2012.
  - 3<sup>rd</sup> Task force Committee meeting to finalize the PAT methodology at BEE, New Delhi in April 2012
  - IPPTA Executive Committee meeting in July 2012 at Chandigarh.
  - Meeting at Udyog Bhawan on T-MAP in June & September 2012.
  - Meeting at Bureau of Energy Efficiency (BEE)/ Energy Efficiency Services Ltd. (EESL) to discuss the Baseline Energy audit reports in May, June, August & September 2012.
  - Meeting with Dr. V. Kumar at DST regarding up-gradation and setting up of IT infrastructure at CPPRI, Saharanpur in June 2012.
  - Visited NCERT to attend the meeting for finalization of Technical Specifications of paper in August 2012.
- ♦ Dr. B. P. Thapliyal, Sc. 'E-II' and Shri Alok Kumar Goel, Sc. 'C' visited Bureau of Energy Efficiency (BEE), Ministry of Power, New Delhi to attend a

meeting organized for reviewing of energy audit reports of pulp and paper mills under PAT Scheme.

- ♦ Dr. B. P. Thapliyal, Sc. 'E-II', Shri Alok Kumar Goel, Sc.'C' and Shri Akhil Naithani, JRF visited Energy Efficiency Services Limited (EESL), New Delhi to attend a meeting for reviewing of various Base line energy audit reports conducted by various auditing agencies under PAT Scheme.
- ♦ Dr. R. D. Godiyal, Sc. 'E-I' attended the Purchase Committee Meeting as Technical Expert held on May 18, 2012 at Government Press, Lucknow.

## LECTURES AND PRESENTATIONS

- ♦ Dr. Vimlesh Bist, Sc.'F' presented a Research Paper on "Issues Related to Bleaching of Wheat Straw Pulp" in IPPTA Seminar on "Advances in Wood Science and Technology Research: Recent Trends, Future Challenges and Opportunities" held on July 19 - 20, 2012 at Chandigarh (UT).



*Dr. Vimlesh Bist, Sc.'F' presenting the research paper on "Issues related to bleaching of wheat straw pulp" during IPPTA Zonal seminar at Chandigarh(UT) on July 20, 2012.*

- ♦ 9th Cess training programme based on "Chemical Recovery & Environmental Management from August 22 - 23, 2012 at CPPRI. Following scientists presented their lectures and presentations during the training programme :-

1. Dr. R. K. Jain Sc.'F' presented a paper on "Desilication of Black Liquor".
  2. Mrs. Rita Tandon, Sc.'F' made a presentation on "Viability of Electroflocculation Technology on Pilot Scale for Decolorisation of Pulp and Paper Effluent".
  3. Dr. S. Panwar, Sc. 'F' made a presentation on "Current Status , Environmental Issues and Water Conservation in Indian Pulp and Paper Industry".
  4. Dr. M. K. Gupta, Sc.'E-II' made a presentation on "Significance of Pollution Parameters & Biological Treatment of Pulp & Paper Mill Effluents".
  5. Dr. A. K. Dixit Sc. 'E-I' presented a paper on "Nature of Black Liquor and their Impact on Chemical Recovery".
  6. Dr. Nitin Endlay, Sc.'E-I made a presentation on "An Introduction to Air Pollution in Paper Industry & Basics of Air Pollution Monitoring -Solid Waste Management In Pulp & Paper Industry".
  7. Dr. Nitin Endlay, Sc.'E-I made a presentation on "Solid Waste Management In Pulp & Paper Industry".
- ♦ Dr. R. K. Jain, Sc. 'F' visited Forest Research Institute (Deemed) University, Dehradun for delivering the lecture on "Bio-refining - Enzymes for Refining - Process parameters for enzyme refining, advantages, limitations and economic aspects".
  - ♦ Dr. R. K. Jain, Sc. 'F' visited Forest Research Institute (Deemed) University, Dehradun for delivering the lecture on "Formation of Slime (Biofilm) and its control" on May 15, 2012.
  - ♦ Dr. B. P. Thapliyal, Sc. 'E-II' presented a Paper on "PAT-Methodology & Implementation in Pulp & Paper Sector" presented during IPMA/CII Conference, Paper Tech 2012 at Hyderabad in June 2012.



- Dr. B. P. Thapliyal, Sc. 'E-II' presented a Paper on "Developments in Paper Manufacturing" Lecture presented during Sudhir Memorial Paper Seminar organized by Federation of Indian Paper Traders Association in New Delhi in September 2012.
- Dr. A. K. Dixit, Sc. 'E-I' presented a paper on "Incineration of black liquor mixed with waste biomas - An option to achieve zero black liquor discharge in small agro based paper mills" in IPPTA Zonal Seminar held on July 19 - 20, 2012 at Chandigarh (UT).
- Dr. Nitin Endlay, Sc. 'E-I' was invited by University of Petroleum and Energy Studies, Dehradun as Guest faculty to make a presentation on Environmental Management in Indian Pulp and Paper Industry Through Conversion of Waste into Energy or Value Added Products at a Management Development Program on "Waste to Energy" - Environmental friendly Technologies held on April 27-28, 2012.



*Dr. Nitin Endlay, Sc. 'E-I' giving Presentation at University of Petroleum & Energy Studies, Dehradun*

- Dr. Nitin Endlay, Sc. 'E-I' was invited by Ambala College of Engineering and Applied Research, (Kurukshetra University), as Guest Faculty to make a presentation on Indian Pulp and Paper Industry - Status, Environmental Issues and Scope of Biotechnological Applications on May 21, 2012.

## REPORTS AND PUBLICATIONS

### Reports

Draft report on "Up gradation & Setting up of IT. Infrastructure at CPPRI Campus, Saharanpur." Submitted to DIPP, Ministry of Commerce & Industry, New Delhi, Prepared by Dr. B.P. Thapliyal & Sh. N.K. Naik.

### ETP Adequacy Report

- M/s Magnum Ventures Ltd, Ghaziabad, (U.P.)
- M/s Sandeep Papers Ltd, Noida (U.P.)

### Water Audit

- M/s Magnum Ventures Ltd, Ghaziabad, (U.P.)

### Publication

#### National

- Lal Priti S., Bist, Vimlesh, Sharma, Arvind and Mathur, R. M. "**Issues Related to Bleaching of Wheat Straw Pulp**" published in IPPTA Zonal Seminar held on July 19 - 20, 2012 at Chandigarh (UT)
- Dixit, A. K., Jain, R. K. and Mathur R. M. "**incineration of Black Liquor Mixed with Waste Biomas - An Option to Achieve Zero Black Liquor Discharge in Small Agro Based Paper Mills**" published in IPPTA zonal seminar held on July 19 - 20, 2012 at Chandigarh (UT) and published in vol. 24, No. 3, 2012

## INTERACTION WITH INDUSTRY

- CPPRI is in interaction with M/s Emami paper mill, Orrisa for enzyme characterization and lab scale studies of recycle paper deinking.
- CPPRI is in interaction with M/s Godawari biorefineries, for enzymatic prebleaching.
- CPPRI is in continuous interaction with M/s Star Paper Mills Ltd., Saharanpur to in connection with the pilot trial on developed biological effluent treatment process under DBT sponsored project.

- Institute is in continuous interaction with reputed enzyme manufacturers and suppliers viz. Value addition, Natuzyme, M/s Advance Biochem, Mumbai for procurement of enzymes for various enzyme applications in Pulp & Paper making.
- Interaction with M/s Century Pulp and Paper, Lalkuan for studies on chemical recovery.
- Interaction with M/s Star Paper Mills Limited for chemical recovery audit.

### Visits to Mills and Other Organisations

- Dr. R. M. Mathur, Director & Dr. S. Panwar, Sc. 'F' visited JK Paper Ltd. Head Office, New Delhi to Discuss of Agenda of DCPPI meeting with the Chairman.
- Dr. R. M. Mathur, Director, Dr. S. Panwar, Sc. 'F' & Dr. Nitin Endlay, Sc. 'E-I' visited Central Pollution Control Board, Delhi to Discussions related to Detailed Implementation Programme for Charter on Water Recycling & Reuse and Pollution Reduction.
- Dr. R. K. Jain, Sc. 'F' & Dr. M. K. Gupta, Sc. 'E-II' visited Centply, Guwahati for Evaluation and assessment of the mills.
- Dr. R. K. Jain, Sc. 'F', Dr. Vasanta V Thakur, Sc. 'B' & Shri Sandeep Singh Bhadoriya, JRF visited Indian Institute of Petroleum (IIP), Dehradun in connection with Joint DBT sponsored project on April 12, 2012.
- Dr. R. K. Jain, Sc. 'F' & Dr. A. K. Dixit, Sc. 'E-I' visited Century Pulp and Paper for studies on soda loss.
- Dr. R. K. Jain, Sc. 'F' & Shri Diwakar Pandey, JRF visited Indian Institute of Petroleum (IIP), Dehradun in connection with Joint DBT sponsored project on May 16, 2012. & May 30, 2012.
- Dr. R. K. Jain, Sc. 'F' & Dr. Tarun Sharma, JRF visited M/s Value Addition Papers Pvt. Ltd. for plant trials for production of lignosulphonates from waste lignin under the PCRA sponsored project on June 01, 2012.
- Dr. R. K. Jain, Sc. 'F' visited Indian Institute of Petroleum (IIP) & Forest Research Institute (FRI), Dehradun in connection with the sponsored project and M.Sc. course discussions respectively on June 11, 2012.
- Dr. R. K. Jain, Sc. 'F' & Dr. A. K. Dixit, Sc. 'E-I' participated in the IPPTA Zonal Seminar held at Chandigarh on July 19, 2012.
- Dr. R. K. Jain, Sc. 'F' & Dr. A. K. Dixit, Sc. 'E-I' visited M/s Godavari Biorefineries Limited, Chandigarh in connection with the sponsored project on August 30, 2012.
- Dr. R. K. Jain, Sc. 'F' visited Directorate of Handmade Paper & Fibre Industry (HMPFI)-KVIC, Mumbai to attend the meeting of the technical committee to decide the Plant & Machinery for HMP sector based on technical advancement on September 11, 2012.
- Dr. R. K. Jain, Sc. 'F' visited M/s Kuantum Papers Limited in connection with lignin studies
- Dr. R. K. Jain, Sc. 'F' & Dr. Vimlesh Bist, Sc. 'F' visited M/s K R Pulp & Paper Mills Limited, Shahjahanpur for assessment of bagasse fire incident site on July 04, 2012.
- Dr. R. K. Jain, Sc. 'F' & Dr. A. K. Dixit, Sc. 'E-I' visited M/s Century Papers Limited, Lalkuan in connection with the sponsored project on July 12, 2012.
- Dr. R. K. Jain, Sc. 'F' visited M/s Cent Ply Private Limited, Kamrup for on- site evaluation under Central capital investment subsidy Scheme (CCIS), 2007 on September 25, 2012.
- Dr. R. K. Jain, Sc. 'F' visited Petroleum Conservation & Research Association (PCRA), New Delhi to discuss the sponsored project activities on September 21, 2012.
- Dr. S. Panwar, Sc. 'F' & Dr. Nitin Endlay, Sc. 'E-I' visited Century Pulp and Paper, Lal Kuan Under CPCB Charter Implementation.

- ◆ Dr. S. Panwar, Sc. 'F' visited Pudumjee Pulp and Papers Ltd., Pune for the Assessment of Water Consumption Bench marks for Specialty Paper Mills.
- ◆ Dr. S. Panwar, Sc. 'F' visited Naini Papers Ltd., Kashipur, Uttarakhand to attend Meeting with mills regarding implementation of CPCB Charter.
- ◆ Dr. S. Panwar, Sc. 'F' & Dr. Nitin Endlay, Sc. 'E-I' visited Sandeep Papers Ltd, Noida for adequacy assessment of ETP.
- ◆ Dr. S. Panwar, Sc. 'F' visited K. R. Pulp & Paper Ltd., Shahjahanpur regarding assess the reason of fire incident in raw material.
- ◆ Dr. S. Panwar, Sc. 'F' visited Pragati Paper Mills Ltd., Ambala for ETP Up-gradation.
- ◆ Dr S. Panwar, Sc. 'F' visited Karnataka Pollution Control Board, Bangalore for the Meeting related to Harihar Polyfibers.
- ◆ Dr. M. K. Gupta, Sc. 'E-II' Mr. N. K. Naik, T.O. 'B' & Mohd. Salim, SSA visited Bindlas Duplux Ltd., Muzaffarnagar for Effluent sample Collection under CPCB Charter.
- ◆ Dr. M. K. Gupta, Sc. 'E-II', Mr. N. K. Nayak, T.O. 'B' & Mohd. Salim, SSA visited Garg Duplux & Board Ltd., Muzaffarnagar for Effluent sample Collection under CPCB Charter.
- ◆ Dr. M. K. Gupta, Sc. 'E-II' & Dr. S. Mishra, Sc. 'E-I' visited Gangotri Paper Mills Ltd., Muzaffarnagar for ETP Performance Evaluation.
- ◆ Dr. A. K. Dixit, Sc. 'E-I' visited M/s Garg Duplex & Papers Pvt. Ltd. for site evaluation for the proposed Common Chemical Recovery system for Agro based paper mills cluster of Muzaffarnagar on September 10, 2012.
- ◆ Dr. S. Mishra, Sc. 'E-I' visited Tirupati Balaji Fibers Ltd., Muzaffarnagar for Newsprint Collection.
- ◆ Dr. S. Mishra, Sc. 'E-I' & Mr. R. P. Singh, T.O. 'A' visited Magnum Ventures Ltd., Ghaziabad for Environmental Monitoring.
- ◆ Dr. S. Mishra, Sc. 'E-I' & Mohd. Farid, RA visited Emami Paper Mills, Balasore for Water Audit & Environmental Monitoring.
- ◆ Dr. S. Mishra, Sc. 'E-I' & Mohd. Farid, RA visited The West Coast Paper Mills Ltd., Dandeli for Calibration of Flowmeters.
- ◆ Dr. S. Mishra, Sc. 'E-I' visited Sandeep Papes Ltd., Noida for adequacy assessment of ETP.
- ◆ Dr. Nitin Endlay, Sc. 'E-I' & Mr. R. P. Singh, T.O. 'A' visited Kuantum Papers Ltd., Sailakhurd, Punjab for NCG Monitoring.
- ◆ Dr. Nitin Endlay, Sc. 'E-I' visited Garg Duplex Ltd., Muzaffarnagar for ETP Performance Evaluation.
- ◆ Dr. Nitin Endlay, Sc. 'E-I' & Mr. R. P. Singh, T.O. 'A' visited Century Pulp and Paper, Lal Kuan for Environmental Monitoring.
- ◆ Shri Alok Kumar Goel, Sc. 'C' visited Indra Gandhi National Open University (IGNOU), Maidan Garhi, New Delhi and met with Shri Ashok Kumar, Registrar under TSCC activities.
- ◆ Shri Alok Kumar Goel, Sc. 'C' visited H. T Burda Media Limited, Greater Noida and met with Shri Suresh K. Nair, Chief Financial Officer and Shri Sanjay Grover, Head- Commercial and Logistics under TSCC activities.
- ◆ Shri Alok Kumar Goel, Sc. 'C' visited Printing and Stationary department Haryana, Chandigarh and met Dr. S. S. Dalal, HCS, Controller Under TSCC activities.
- ◆ Shri Alok Kumar Goel, Sc. 'C' visited Printing and Stationary Department Punjab, Chandigarh and met Smt. Kiran Gupta, Superintendent Under TSCC activities.
- ◆ Dr. Vasanta V Thakur, Sc. 'B' visited Thapar Corporate Institute of Research & Development (TCIRD), Yamunanagar on May 15, 2012 to discuss the progress and the future the line of action in the collaborative CESS project.



- ♦ Sh. Satya Dev Negi, Sc. 'B', Sh. Kuldeep Sharma, JRF visited Mohit Paper Mill, Bijnore from May 30, 2012 for wet end evaluation.
- ♦ Sh. Satya Dev Negi, Sc. 'B', Sh. Pankaj Kumar Goley, T.O.'B' and Sh. Gyan Pal Singh T.O.'A' visited Emami Paper Mill, Balasore, Orrisa.
- ♦ Sh. Satya Dev Negi, Sc. 'B' visited Greenobin Recycling Pvt. Ltd., New Delhi on August 21-24, 2012 for waste paper recycling system in Airport Authority of India, New Delhi regarding paper collection system in New Delhi & NCR.
- ♦ Shri. Arvind Kumar Sharma, SSA visited Patent office, New Delhi to file the patent on "Pre-treatment study of wheat straw pulp" on September 5-6, 2012.
- ♦ Mr. R. P. Singh, T.O.'A' & Mr. J. S. Panwar, TG.VI visited Shree Shyam Pulp & Boards Mills for Environmental Monitoring.
- ♦ Mr. R. P. Singh, T.O.'A' & Mr. M. S. Pundir, T.O. 'A' visited DCRTTP, Yamunanagar for Environmental Monitoring.
- ♦ Mr. R. P. Singh, T.O.'A', Mr. J. S. Panwar, TG.VI, Mr. M. S. Bhandari, TG.VI & Mohd. Farid, RA visited Star Paper Mills Ltd., Saharanpur for Environmental Monitoring.
- ♦ Mr. R. P. Singh, T.O.'A', Mr. M. S. Pundir, T.O.'A', Mr. M. S. Bhandari, TG.VI & Mohd. Farid, RA visited Bilt, Yamunaangar for Environmental Monitoring.
- ♦ Mohd. Farid, RA visited Shreyans Industries Ltd, Ahmedgarh, Punjab for Effluent collection and analysis.
- ♦ Mohd Farid, RA visited Naini Papers Ltd., Kashipur and Utrakhand to provide training on waste water analysis to mill personnel.
- ♦ Shri. Diwakar Pandey, JRF visited Indian Institute of Petroleum (IIP), Dehradun for conducting the experiment under the joint collaborative project between CPPRI & IIP on August 14, 2012 and August 30, 2012.

- ♦ Shri. Diwakar Pandey, JRF visited Indian Institute of Petroleum (IIP), Dehradun for conducting the experiment under the joint collaborative project between CPPRI & IIP on September 18, 2012.
- ♦ Dr. Tarun Sharma, JRF visited Madhya Bharat Paper mills for lignin studies.
- ♦ Shri. Vipin Gupta, JRF, Shri. Dharmendra Kumar JRF & Mr. Sandeep Singh, JRF, visited M/s Abhishek Paper Mills Ltd., Barnala (Punjab) for conducting the enzymatic pre-bleaching trials at mill site on April 26, 2012.

## VISITORS

### International

- Mr. Ids Auke Boersma and Mr. Pascal Telaar from eConvert Water & Energy, The Netherlands visited CPPRI on April 26, 2012 to explore the potential of anaerobic treatment technologies in Indian Pulp and Paper Industry.



*Visit of Delegation from the Netherlands to CPPRI*

- A four member delegation from Prairie Pulp and Paper Inc. Canada visited CPPRI from June 05 - 08, 2012. In connection with sponsored project on "Laboratory and Pilot Plant Trials of Canadian Wheat Straw".
  1. Mr. Jeff Golfman, Director Prairie Pulp and Paper Inc., Canada
  2. Mr. Qi (Keith) Luo, Team Leader, Pulp and Paper Processing, AITF, Canada

3. Mr. Wade Chute, Programme Leader, Fibre Processing, AITF, Canada
4. Mr. Puneet Chopra, Prairie Pulp and Paper Inc., India

## National

- Shri A. K. Vidyarthi, Senior Environmental Engineer, CPCB visited CPPRI on April 17, 2012 for attending meeting related to framing of Charter for Water Recycling & Pollution Prevention and Detailed Implementation Programme in consultation with CPPRI.
- Dr. I. D. Mall, IIT Roorkee, Dr. Indu Mehrotra, IIT Roorkee, Dr. B. R. Gurjar, IIT Roorkee, Dr. Dharam Dutt, IIT Roorkee (Saharanpur Campus) Dr. Vivek Kumar, IIT Roorkee (Saharanpur Campus), Mr. R. K. Singh, UPPCB, Muzaffarnagar, Dr. Ankur Kansal, UEPPCB, Dehradun, Shri Pawan Agarwal, Chairman, Kumaon - Garhwal Chamber of Commerce & Industry (Paper Unit Chapter) and Shri Ajay Kapoor, Paper Manufacturers Association, Muzaffarnagar and Shri P. G. Mukundan, Secretary General, IARPMA visited CPPRI to attend meeting of Report Evaluation Expert Committee under Charter for Pollution Prevention and Water Recycling in Pulp and Paper Industries in Ganga River Basin
- Mr. Abhinav Srivastava, Enviroway Consultants Pvt. Ltd., New Delhi visited CPPRI as guest faculty for training programme on Chemical Recovery and Environmental Management in Pulp and Paper Industry.
- Dr. Rita Kumar, Sc.'G', Institute of Genomics and Integrated Biology (IGIB), New Delhi visited CPPRI to in connection with the two project CESS and DBT projects on biobleaching and bioremediation of effluents at mill scale.
- Mr. Chinmoy Mondal and Dr. Ramesh Shettar from Godavari biorefineries Ltd. visited CPPRI to discuss the sponsored project scope and modalities.

- Dr. Rath from Security Paper Mills, Hoshangabad visited CPPRI to discuss the progress of the sponsored project "Enzymatic refining of Cotton samples".
- Shri G. C. Kandpal, Deputy Manager (QTS). JK Paper Limited, Unit Central Pulp Mills, Gujarat.
- Shri Sarvachan Singh Chauhan, Manager (R&D and QC) Khanna Paper Mills Limited, Amritsar, Punjab.
- Shri Dakshina Ranjan, Vice President (R&D), Shri Rakesh Dhanjal, Dy. Manager (QC), Shri Sudhir Kumar Ratra (Deputy Manager), Kangaroo Industries Limited Ludhiana.
- A group of M.Sc. (Forestry) students from Forest Research Institute, Dehradun visited CPPRI to see the Paper Museum & Laboratories on September 7, 2012.



*Dr. A. K. Dixit, Sc. 'E-I' and Shri. Avtar Singh, SSA from CPPRI with the students of M.Sc (Forestry) during their visit at CPPRI*

## MSc. PROGRAMME IN COLLABORATION WITH FRI DEEMED UNIVERSITY, DEHRADUN

To cater the HRD need of the Industry, CPPRI, Saharanpur and ICFRE, Dehradun have jointly started a two year M.Sc. programme in "Cellulose and Paper Technology" with a strength of 14 candidates. This two year Post Graduate (4 semesters) course commenced from August 01, 2011. The second year (3rd & 4th Semesters) of the course is in progress at CPPRI since July 01, 2012. 3rd Semester which is in progress focuses on Pulp



Technology, Chemical Recovery, and Material and Energy balance, Paper Technology, Secondary Fibre Technology and Practical.



*Dr. R. K. Jain, Sc. 'F' with students of M.Sc. Cellulose and Paper Technology (1st Batch.)*

## TRAINING PROGRAMME

- ♦ Training (two months and 20 days) was imparted to two candidates in the area of biotechnological applications in pulp and paper industry.
- ♦ A one week training programme on Waste Water Analysis for ETP Monitoring was organised by CPPRI under Implementation Charter for Water Recycling & Pollution Prevention in Pulp & Paper Industries in Ganga River Basin. The training programme was attended by officials from 9 mills of UP & Uttarakhand.



*Training being rendered to Participants of Training Programme on Waste Water Analysis for ETP Monitoring*



*Trainees with CPPRI Faculty of Training Programme on Waste Water Analysis for ETP Monitoring*

- ♦ A three month Training on ETP designing for a Wood based Pulp and Paper Mill was rendered to Mr. Nitin Mishra, M.Tech. student of Department of Environmental Studies, Kurukshetra University, Haryana

## WORLD ENVIRONMENT DAY 2012 CELEBRATIONS

World Environment Day was observed by CPPRI on June 5, 2012. To mark the occasion, a programme was held in CPPRI auditorium where in Dr. R. M. Mathur, Director, CPPRI addressed the staff



*Dr. R. M. Mathur, Director addressing CPPRI staff and Dr. Nitin Endlay, Sc. 'E-I' giving lecture on Green Economy on World Environment Day 2012*

highlighting the significance and objective of observing World Environment Day every year. A presentation was made by Dr. Nitin Endlay on the theme of the World Environment Day 2012 i.e. "Green Economy", which included need of Green Economy especially in Indian perspective,



challenges in transition towards green economy and CPPRI initiatives.

## NEW MEMEBRSHIP

CPPRI welcome the new members, Mr. Rohit Gupta, M/s Goodrich Agrochem Pvt. Ltd., Karnal (Haryana) becoming the part of our membership brigade.

## Industry News

The Development Council for Pulp, Paper & Allied Industries has been reconstituted vide Gazette Notification no. S.O. 765(E) dated April 10, 2012 for the period two years. Shri Harsh Pati Singhanian, MD, JK Papers Ltd., has been nominated as Chairman & Dr. R. M. Mathur, Director CPPRI as Member Secretary of the Development Council. The constitution of the Development Council for Pulp, Paper & Allied Industries is as under :

S.No	Name & Address
1.	Shri Harsh Pati Singhanian <b>CHAIRMAN</b> Managing Director J.K.Paper Ltd., Nehru House, Bahadur Shah Zafar Marg New Delhi -11002
2.	Shri Talleen Kumar , IAS Joint Secretary (IPP), Govt. of India (Incharge of Paper Division) Ministry of Commerce & Industry Deptt. of Industrial Policy & Promotion Udyog Bhawan, NEW DELHI - 110 011
3.	Shri N.Gopala Ratnam Chairman and Managing Director Seshasayee Paper and Boards Limited, Pallipalayam,Cauvery R.S.P.O Erode - 638 007 Tamilnadu

S.No	Name & Address
4.	President Indian Paper Manufactures Association, PHD House, 4th Floor, 4/2, Shri Institutional Area, Opp. Asian Games Village New Delhi - 110 016
5.	Shri Pradeep Dhobale Director, ITCL, ITC Ltd., Regd.& Corp. Office, Virginia House 37JL, Nehru Road, Kolkata - 700 071
6.	Shri R.R. Vaderah Managing Director, BILT, Ballarpur Industries Ltd., First India Place, Tower C, BlockA, Sushant Lok I Mehrauli - Gurgaon Road, GURGAON -122002 (Haryana)
7.	Shri M.V. Narasimha Rao, Chairman- cum- Managing Director, Hindustan Paper Corporation Ltd., 75C, Park Street, Ruby Buidling, Kolkata- 700 016
8.	Shri R.C.Rastogi President IRPMA & CMD Khatema Fibers Ltd., 404-405 Vikas Deep Building District Center, Laxmi Nagar DELHI -110092
9.	Sh. Anil Kumar, CEO & Exectutive Director, Shreyans Industries Ltd., (Unit : Shreyans Papes) Works, Ahmedgard - 148 021 Dustt. Sangrur, Punjab

S.No	Name & Address
10.	Shri S.R. Rabinder CMD, Sennar Paper & Boards Ltd., 3/2 Umayal Street, Kallapak , CHENNAI -641 010
11.	Shri P.S.Patwari President INMA & Executive Director Emami Paper Mills Ltd., 687, Anandpur ,E.M. .bypass , Kolkatta - 700107
12.	Shri Pramod Agarwal President - IARPMA Indian Agro & Recycled Paper Mills Association 404 Vikrant Tower, 4 Rajendra Place, NEW DELHI- 110 008
13..	President Indian Pulp and Paper Technical Association (IPPTA) CPPRI Campus, Paper Mill Road., Near Himmat Nagar, PO Box No. 47, Saharanpur - 247 001(U.P)
14.	Shri C.S.Panigarhi, President, Voith Paper Technology (India) Ltd., ECOSPACE, BLOCK 3A, 6th Floor, IIF/11(Old AAll),New Town, Rajarhat, Distt, - 24, Parganas, Kolkata- 700 156
15.	Shri B. S. Kampani Chairman, Indian Institute of Packaging E-2, MIDC Area, Post Box No.9432, Andheri (East) Mumbai - 400 093
16.	President, All India Fedration of Masters Printers 605, 6th Floor, Madhuban 55 Nehru Place New Delhi - 110 019

S.No	Name & Address
17.	Shri Pawan Khaitan MD ABC Paper Ltd., SCO18-19 ( First Floor) Sector 8 C Madhya Marg , CHANDIGARH -160009
18.	Shri Satya Pal Gupta Ex-President, FPTA, Narsingh Dass & Co., 3980/9, Chawri Bazar, Delhi- 110 008
19.	Dr. R. M. Mathur <b>MEMBER SECRETARY</b> Director Central Pulp & Paper Research Institute Paper Mill Road, Himmat Nagar Saharanpur - 247 001, Uttar Pradesh

## राजभाषा हिन्दी सप्ताह

सितम्बर 1 से 14, 2012 तक केन्द्रीय लुग्दी एवं कागज अनुसंधान संस्थान में राजभाषा हिन्दी पखवाड़ा मनाया गया। जिसका उद्देश्य ना सिर्फ दिन प्रतिदिन के कार्यों अपितु वैज्ञानिकी एवं तकनीकी कार्यों में भी राजभाषा हिन्दी के उपयोग के संवर्धन हेतु कर्मियों को जागरूक करना था। इस संबंध में दिनांक सितम्बर 14, 2012 को डॉ० आर०एम० माथुर, निदेशक केन्द्रीय लुग्दी एवं कागज अनुसंधान संस्थान की अध्यक्षता में एक सभा का आयोजन किया गया, जिसमें संस्थान के वरिष्ठ वैज्ञानिकों तथा प्रशासन एवं लेखा विभाग के कर्मियों ने भाग लिया, बैठक में देश के हिन्दी भाषी क्षेत्रों में स्थित कागज मिलों के तकनीकी कर्मियों के द्वारा हिन्दी के वृहत् उपयोग हेतु वैज्ञानिकीय लेखों तथा पाठ्य पुस्तिकाओं के हिन्दी अनुवाद हेतु चर्चा की गई।

## स्वतंत्रता दिवस - 2012

स्वतंत्रता दिवस के अवसर पर संस्थान के प्रांगण में संस्थान के निदेशक डॉ० आर० एम० माथुर ने ध्वजारोहण किया। इस अवसर पर उन्होंने एक संदेश भी दिया जिसमें उन्होंने मुख्यतः संस्थान में चलायी गयी ग्यारहवीं पंचवर्षीय योजना की परियोजनाओं की सफलताओं को गिनाया, वहीं बारहवीं पंचवर्षीय योजना में चलायी जाने परियोजनाओं का भी विस्तार से उल्लेख किया। उन्होंने कहा कि संस्थान लगातार उन्नति कर रहा है और वर्ष दर वर्ष अपने आंतरिक राजस्व के लक्ष्य को बढ़ा कर उसे प्राप्त भी कर रहा है।

राजभाषा क्रियान्वयन नीति के अन्तर्गत उन्होंने कहा कि संस्थान में लगातार हिन्दी में कार्य को बढ़ावा दिया जा रहा है और संस्थान में काफी कार्य हिन्दी में होने लगा है। इस अवसर पर उन्होंने यह भी घोषणा की कि वर्ष में हिन्दी में अधिकतम कार्य करने वाले कर्मचारियों को पुरुस्कृत भी किया जायेगा।



## कर्मचारी समाचार

### सेवानिवृत्ति

नाम	पद	तिथि
श्री जनेश्वर प्रसाद	टी.ओ. 'ए'	३०-०६-२०१२





Address for Communication  
Director

## Central Pulp & Paper Research Institute

Post Box No. 174, Paper Mill Road, Himmat Nagar, Saharanpur-247001, U.P., India

Phone: 0132-2714059-62, Fax: 0132-2714052, 54

E-mail : [director@cpri.org.in](mailto:director@cpri.org.in), Website : [www.cpri.org.in](http://www.cpri.org.in)

**We welcome suggestions & comments  
for further improvement of this New Bulletin.**