IPIRTI-SIPMA INTERACTIVE MEET held in the Conference Hall of IPIRTI Bangalore on 26th August, 2015. The IPIRTI-SIPMA MEET was inaugurated by lighting the lamp by Chief Guest Dr. A.K.Verma, IFS (Retd), Ex-PCCF (HoFF), Karnataka followed by other dignitaries. Dr. B. N. Mohanty, IFS Director, IPIRTI, welcomed all the dignitaries and members of SIPMA and all the invited guests. He ex-
pressed his pleasure to have this interactive meet.

Dr. B. N. Mohanty, IFS, Director informed that the interactive meet provides an opportunity for the industries to articulate their views and express their problems which will help IPIRTI to prioritize future research strategy for the promotions and development of wood and panel industry. Mentioning about the efforts being made to meet wood demand by sourcing timber from plantation and trees outside forest especially species like *Eucalyptus* and *Poplar* which have made great strides in North India states and *Melia dubia* as plywood species is being promoted in South India.

Dr. Mohanty, IFS, Director mentioned about the Institute service to meet the technological needs of the industries and also IPIRTI’s effort to help other issues facing the plywood and veneer mills like forest policies, macroeconomics, tax and land ownership policies, fumigation certificates for important logs at Indian Ports and decision of Honorable Supreme Court and State High Courts on the matter of issuing of licenses. He also highlighted technology innovation brought out by IPIRTI for minimizing harmful formaldehyde emission as environmental quality of the product will found the basis for future competitiveness of the wood products.

After the welcome address Mr. Siraj Asger Ali, President, SIPMA briefed about the history of the Association. He said that SIPMA was started in the year 1948 and it was the oldest association in the country. IPIRTI and SIPMA had a very close link. He highlighted that we should have an interactive meet atleast once a year, a platform where we can discuss ways and means for a better future where the industries get opportunity to explore themselves. All these years, since independence we have found that Government and industries have gone their own way. It’s time to change our approach and attitude. We need to start thinking as a team. When we are all together, we can present our problems, make them understand and explain. He complimented Mr. Moiz Vagh, Managing Director, M/s. Hunsur Plywood Works Pvt. Ltd., Hunsur and his team for the efforts and sacrifice they have done for promoting the plantation of *Melia dubia* species. He emphasized that it took 25 years in promoting species of *Eucalyptus* and *Poplar*. Now, what we need to do is, to look at the angle of promoting these plantation species and this can be achieved. He stressed that the Forest Department has understood the industrial problems and have relaxed the rules.
During the Chief Guest address, the Chief Guest Dr. A.K. Verma, IFS, (Retd.) thanked Dr. Mohanty, Director, IPIRTI for the introduction. He also thanked IPIRTI and SIPMA for organizing the meet and inviting him as the Chief Guest. Dr. A. K. Verma appreciated the R&D works of IPIRTI, Training activities and the services rendering to the plywood industries.

While deliberating on the important issue of licensing, Shri. Verma said that he will raise the voice with the Central and State Governments, on behalf of the plywood industries. He also opined that only plywood industries having valid license should be allowed to operate and no further relief be granted to the industries. When one of the representative raised the issue of restriction on selling of timber to other states, he opined that such restrictions are to be removed.

This was followed by Technical Presentation on the topics given below by the scientist of IPIRTI,

1. Compregs made from coloured veneers: Densified Laminated Lumber by Ms. D. Sujatha, Scientist, IPIRTI Bangalore

2. Polyurethane based adhesives for bonding Panel Products by Mrs. B. S. Mamatha, Scientist, IPIRTI Bangalore

The scientists highlighted the technological innovations of IPIRTI. The detailed technological input, the economy of adopting these technologies and also its impact on environment were presented to the members. The industries appreciated the work and opined that these technologies should be demonstrated to industries for early adoption & commercialization. The scientists informed that the technology is ready for transfer and if any industry is interested, immediately it would be demonstrated or the technology package will be provided.

After the technical presentation, interaction session was held.

Based on the elaborate discussions held, the following recommendations were made:

1. Issues pertaining to Licensing of Saw Mill/Veneer/Plywood Industries

During the discussion it transpired that there are several Plywood and Veneer Industries coming up in the state without license in view of existing ambiguity created by decisions of Supreme Court of India and Karnataka High Court. The conference requested the State Government to take census of all the units and take action to issue licenses to these industries, so that they can continue production within the parameters of the law in compliance with the Orders of the Supreme Court of India and High Court of Karnataka.
2. **Supply of quality planting material – *Melia dubia***

Although various plantation programs are on-going activity for quite some time in the State of Karnataka, however *Melia dubia* has been recently identified as one of the fast growing species in the region. A need was felt for the mass production of quality seedlings through clonal propagation or seed germination in order to meet large scale demand of seedlings by the farmers/private planters.

3. **Working out business model for *Melia dubia* plantations**

The overall views of the members were that *Melia dubia* can be used for making any kind of panel products which is economical and also found to be farmers’ friendly to grow. A need was also felt to take up a systematic study to get a reliable estimate for the productivity of *Melia dubia* and also to work out a protocol for raising the *Melia dubia* plantation.

Hands on experience of farmers engaged in *Melia dubia* plantation and other Horticulture crops as intermediate crops has shown very good market potential for propagation of the idea in terms of Business model. A study on plantation of *Melia dubia* shows that an income of Rs.15.0 lakhs/ hectare after a period of 10 years by selling logs. Value addition can be done at farmer’s place by converting logs in to veneer, by installing a peeling lathe in common facility centre (CFC) making an investment of about Rs 50 lakhs. In so happening the income by selling veneer would be enhanced by 1.5 times over that of selling logs.

In a rough estimate the per annum income from a CFC will be to the tune of Rs.5.63 Crores from processing logs of a captive plantation of 25 hectares.

4. **Requirement of Fumigation Certificate for Imported Logs**

In view of the difficulties faced by many importers in general and plywood industries in particular with regard to the Phyto Sanitary Certificate requirements of Fumigation with Methyl Bromide (MBr) which is banned all over the world. As exporting countries are unable to treat the logs with MBr and as our Government is insisting on this treatment, the imports are getting affected causing hardship and non-availability of logs. Federation of Indian Plywood & Panel Industry (FIPPI) has taken up the matter with Department of Agriculture & Co-operation, Government of India. In a meeting on 20.8.2015, it has come out that requests have been made to exporting countries which no longer use MBr for phyto sanitary treatment to provide with data to demonstrate efficacy of alternative treatments/fumigants on pests of quarantine concern to India. As soon as efficacy data is received, an evaluation will be carried out on priority and steps taken for the incorporation of the same in the PQ regulation. In the above exercise IPIRTI is ready to provide all necessary co-operation in the evaluation of efficacy.
data if sought by department of Agriculture & Co-operation. The concerns raised by Department of Agriculture about Bio-security threat to the Nation from about 100 pests including dreaded Asian long horn beetle which are until now absent in India was taken note of. Further, as sought by them, the Industry Members were requested to be in contact with Department Agriculture & Co-operation for providing any assistance needed in procuring efficacy data of alternative treatments through their exporters concerned.

Finally the meeting ended with Vote of Thanks to the Chair and all other participants by Ms. D. Sujatha Scientist, IPIRTI, Bangalore

**RESEARCH & DEVELOPMENT**

**COPPERIZED KARANJ SEED (PONGAMIA PINNATA) OIL EXTRACTIVE AS A PROTECTIVE MEASURE IN PLYWOOD MANUFACTURE**

Green plants are rich sources of naturally occurring pesticides or fungicides that can be utilized in various ways. The objective of this study was to incorporate these naturally and abundantly occurring pesticides into plywood and evaluate its performance. Therefore an attempt was made to develop an eco-friendly green preservative using naturally available plant resources with high toxicity to wood destroying organisms and low toxicity to humans by Mrs. Riya Tudu, Scientist and her team at IPIRTI Field Station Kolkata. Copper was incorporated into Karanja seed extractive. 12mm plywood samples at different concentration (0.5 to 5%) preservative were manufactured by using copperised karanj extractive as a glue line preservative. These samples were evaluated to find out the effectiveness as wood preservatives against termites and wood borers. From the results obtained in this study it can be concluded that 3% concentration of the preservative can be utilized in plywood manufacture which can resist against wood borers. Concentrations above 3% of the preservative interfere with the bonding properties of the resin giving it comparatively inferior glue bonding. The result of MoE, MoR test of these panels at 2% and 3% concentrations show satisfactory limit of acceptance, when compared with Marine and Shuttering grade plywood.

**RECOMMENDATIONS OF IPIRTI FOR REVIEW AND REVISION OF NATIONAL FOREST POLICY, 1988**

Dr. V. K. Upadhyay, Scientist, IPIRTI, Bangalore represented IPIRTI by attending the “Regional Workshop of Coastal States and Island Region for the Review and Revision of National Forest Policy” at the Telengana State Forest Academy, Dullapally, Hyderabad organised by IIFM, Bhopal during 3rd-4th September 2015.

According to 1988 National Forest Policy, forest based industries should raise their own plantations for
meeting their raw material needs. During the intervening 27 years a lot of changes in the forest based industry scenario have taken place. Trees grown outside forests in homesteads, private lands, farmlands and other non-forest lands have contributed significantly to the industrial raw material and timber production.

### Indian demand and supply scenario of wood  (in million m³)

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<tbody>
<tr>
<td>1</td>
<td>Wood demand for Domestic/Industrial uses</td>
<td>50</td>
<td>64</td>
<td>73</td>
<td>82</td>
<td>95</td>
<td>112</td>
<td>123</td>
</tr>
<tr>
<td>2</td>
<td>Output from forests</td>
<td>24</td>
<td>12</td>
<td>12</td>
<td>3</td>
<td>2.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Output from plantation and social &amp; farm forestry</td>
<td>41</td>
<td>47</td>
<td>53</td>
<td>58.5</td>
<td>60.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Import</td>
<td>1</td>
<td>2.71</td>
<td>3.37</td>
<td>5.71</td>
<td>7.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Export</td>
<td>0.05</td>
<td>0.07</td>
<td>0.08</td>
<td>0.1</td>
<td>0.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total (2+3+4)</td>
<td>54.00</td>
<td>61.71</td>
<td>68.37</td>
<td>67.21</td>
<td>70.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deficit</td>
<td>10.00</td>
<td>11.29</td>
<td>13.63</td>
<td>27.79</td>
<td>41.20</td>
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</table>

The study of the above table reveals that the production of timber by Government forest has declined drastically from 24 million m³ in 1985 to 2.98 million m³ in 2013. This is more so because of ban imposed on forest felling during 1988. Whereas the supply position from Agro & Farm forestry has increased to 65 million m³ as in 2013. This is contributed from leading states like Haryana and Punjab, who have been producing large quantity of timber for Industry from agroforestry (Eucalyptus and Popular) of short rotation species because both states have very less forest and depend on farm forestry.

The plantation timbers being short rotational need processing and value addition for converting to plywood, particle board, MDF etc. for becoming a viable wood substitute. Accordingly a number of plywood mills have come up in Punjab, Haryana, Uttrakhand belt beside traditional factories in West Bengal, Assam & South India. Of late, Port based industries have come up in Kandla, Chennai, Mangalore and Kolkata also sourcing the raw materials from imports. The plantation based and Port based plywood mills fill the demand-supply gap of timber the country, by producing more and more plywood from non-forest sources. That is how they help to reduce the pressure on Natural Forests and contributes to Conservation of Forest Resources in the country.

However, the Hon’ble Supreme Court of India in its order dated 30th October 2002 directed that no...
licenses for wood based industries in any state of the country will be issued or expansion of the existing ones will be done, till the timber availability from all sources (forest, non-forests or imported) is assessed examined and permitted by the Central Empowered Committee (CFC). Till date, this matter of assessment of timber from trees outside forest for issuance of new licenses is still not resolved. (Incidentally, the total estimated production of timber from trees outside forest in the country is about 44.3 million m³, FSI 2010). As a result, the expansion and licensing of plywood mills in the country is severely affected as observed from NIPMA (North Indian Plywood Manufacturing Association), HPMA (Haryana Plywood Manufacturing Association), SIPMA (South India Plywood Manufacturing association), etc.

In the above background, the recommendations of IPIRTI for the good health of panel industry and overall interest of Natural Forest in the country to be considered during the Review and Revision of National Forest Policy, 1988 are as follows:

• Expansion of plywood mills, Particle Board and MDF plant, which use plantation and imported wood should be given encouragement and licensing should be made easier in the interest of forest conservation.

• Improvement of plantations through local community (Agro forestry sector) provide the benefits through the government agency i.e. Promoting farmers to grow more trees and provide value based system. (Grading of timber, cutting of tree, Standard price etc.)

• Government should reform regulations and laws that ban felling of trees and transit of wood within India. Sustainable agro-forestry and farm forestry must be encouraged through financial and regulatory reforms, particularly on privately owned lands. National Forest Commission to review Government should reform regulations and laws that ban felling of trees and transit of wood within India. Sustainable agro-forestry and farm forestry must be encouraged through financial and regulatory reforms, particularly on privately owned lands.

• NABARD and Ministry of Environment, Forest & Climate Change, Govt. of India should promote investments into farm forestry sectors and facilitate flow of bank credit for farm forestry projects which will help the farmers.

• Suitable incentives for growth and development of farm forestry and simplification of restrictive regime of tree felling permits and timber transit rules for farm grown timbers.

• MoEF&CC and State Govt. should permit wood based industries to raise captive industrial plantation on degraded forests on a mutually agreed basis to meet part of the future raw material requirement.
- Development of sound R&D base and extension services for economically attractive agroforestry models, genetically improved planting of suitable tree species and shade, tolerant varieties of tree crops.

- Development of new generation value added products like bamboo based suitable products, agro-residue products, laminated veneer lumber, etc. Because wood substitution to overcome the shortage of timber for production of panel product by utilization of agro/forest residues like rice husk, bamboo, etc., which will not only add to economy but also reduces pressure on forests there by improving environment and ecology.

- A new Data base system in the lines of National Sample Survey Organization (NSSO) for Forestry, Forest Products, Wood and Panel Industries may be created. This will fulfill the long felt need for the statistical data on Production and Consumption, Demand and Supply at National Level for the Development of organised sector of Panel industries in the interest of forest conservation in the country.

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**INDUSTRY VISITS:**

19.07.2015-21.07.2015: Dr. B.N. Mohanty, IFS, Director and Shri. S.C. Sahoo, Scientist, Field Station Kolkata visited to M/s. ACBR, Aizwal, Mizoram for demonstration of the resin manufacturing in resin kettle installed by IPIRTI.

20-21.07.2015: Dr. B.N. Mohanty, IFS, Director and Shri. S.C. Sahoo, Scientist, Field Station Kolkata visited Bamboo CFC, Aizwal, Mizoram for demonstration of the resin manufacturing in the resin kettle installed by IPIRTI. Both the Officers had discussion with Hon’ble Minister Shri. PuLalrinmawia Ralte and Addl. PCCF, Govt. of Mizoram regarding future prospects of bamboo products and training in Mizoram.


22.07.2015: Dr. B.N. Mohanty, IFS, Director and Shri. Amitava Sil, Officer-In-Charge, IPIRTI Field Station, Kolkata visited to M/s. Mutha Industries Pvt. Ltd, Tripura and had a discussion with Shri. Sanjay Singh, Director regarding the latest development done by IPIRTI on Bamboo based products.

22.07.2015: Dr. B.N. Mohanty, IFS, Director and Shri. Amitava Sil, Officer-In-Charge, IPIRTI Field Station, Kolkata visited M/s. Tripura Bamboo Mission, Agartala and had discussion with Shri. V.G. Jen-
ner, IFS, Mission Director, Tripura, Bamboo Park, Shri. S. Talukdar, PCCF (HoFF) and Shri. Rameswar Das, Managing Director, Tripura Forest Development Corporation, (TFDC) Agartala about possible Technology Transfer. Both the Officers also visited Bamboo Park Area in Bodhajungnagar to have a look on process involved in the manufacture of Bamboo Lumber.

23.07.2015: Dr. B.N. Mohanty, IFS, Director and Shri. Amitava Sil, Officer-In-Charge and Shri. S.C. Sahoo, Scientist, IPIRTI, Field Station Kolkata visited Aranya Bhawan and had discussion with Shri. Azam Zaidi, IFS, PCCF, Wildlife & CWLW, Shri. N. K. Pandey, PCCF (General), Govt. of West Bengal regarding latest advances made by IPIRTI.

11.08.2015-12.08.2015: Shri. Amitava Sil, Officer-In-Charge, IPIRTI Field Station, Kolkata visited plywood units located at Patna and had a discussion with Shri. Dilip Agarwal, President, Patna Plywood Association for understanding their problem during manufacturing of plywood and motivating them to take membership of IPIRTI.

20.08.2015: Dr. B. N. Mohanty, IFS, Director and Smt. Mamatha B. S., Scientist visited Channapatna Crafts Park at Ram Nagar Distt. and met Smt. Sreekala Kadidal and other functionaries for possible collaboration.

20.08.2015-21.08.2015: Shri. Amitava Sil, Officer-In-Charge, IPIRTI Field Station, Kolkata visited plywood units located at North Bengal and had a discussion with Shri. Salil Kumar Saha, President, North Bengal Plywood and Allied Product Manufacturer Association for understanding their problem during manufacturing of plywood and motivating them to take membership of IPIRTI.

03.09.2015: Shri. Amitava Sil, Officer-In-Charge, IPIRTI Field Station, Kolkata visited M/s B.S. Progressive accompanied by one month course trainee’s on as factory visit being a part of course on “Plywood Manufacturing Technology.

**MEETINGS/SEMINARS/ CONFERENCE**

08.07.2015: Dr. B.N. Mohanty, IFS, Director and Shri. Anand Nandanwar, Scientist attended Meeting with Ms. Lalthan Pari, Scientist from BIS regarding Minutes of CED 20 Meeting and further action to be taken.

15.07.2015-16.07.2015: Dr. V.K. Upadhyay, Scientist and Shri. Ashok Kumar A.C., Technical Officer, attended the conference organised by Data Centre IT Summit Bangalore 2015 for the “Data Centre Dynamics Converged India at Bengaluru.
06.08.2015-07.08.2015: Dr. Ranjana Yadav, Officer In-charge, IPIRTI-Centre, Mohali attended the training program on Inter laboratory Comparison/PT at NITS, BIS, Noida.

22.08.2015: Ms. Sujatha D. and Mrs. Mamatha B.S, Scientists attended a meeting regarding the project “Upgradation of the technology on the development of 50mm compregs using dyed veneers of plantation species (Densified Laminated Lumber) on commercial unit” at M/s. Indeutsch International Ltd., Noida.

24-25.08.2015: Dr. V. K. Upadhyay, Scientist attended and presented a paper entitled “Modelling And Forecasting of Production and Consumption of Indian Wood and Wood Products using Arima Models” in the National Seminar on ‘Time Series, Analytics and Recent Advances in Statistical Modelling’ (NC-TAS-2015) organised by Department of Statistics, Central University of Rajasthan, Kishangarh.

31.08.2015: Shri. Prakash V, Scientist, visited Institute of Forest Genetics and Tree Breeding (IFGTB), Coimbatore for attending Dr. S. Kedharnath Memorial Lecture (KML – 2015).


17.09.2015: Dr. Ranjana Yadav, Officer In-charge, IPIRTI-Centre, Mohali attended the Awareness program on Lab Information Management Systems (LIMS) in BIS, Mohali.
Visit of Dignitaries:

Shri. Deepak Vasant Kesarkar, Minister of State for Finance & Rural Development, Maharashtra visited IPIRTI Bangalore on 3rd September 2015. Dr. B. N. Mohanty, Director and Ms. Sujatha D., Scientist briefed about the Institute’s activities and specifically the Bamboo Technologies developed at IPIRTI, Bangalore.

Dr. B. N. Mohanty Director IPIRTI discussed the Patent issues with Shri. N. G. Lakshminarayan, Senior Manager, NRDC, Bangalore in presence of Mrs. B.S. Mamatha, Scientist, IPIRTI, Bangalore on 10th of July 2015

08.09.2015: Shri. Debkumar Biswas, Scientist-In-Charge, Composite Cell, Indian Jute Industries Research Association, visited IPIRTI Field Station, Kolkata and had a discussion with Shri. Amitava Sil, Officer-In-Charge, IPIRTI, Field Station Kolkata regarding collaborative research on “Development of Jute based composite products”.

Visit to abroad:

Ms. Sujatha D. and Shri. Uday D.N., Scientists, IPIRTI, Bangalore have returned back after successfully attended and completed the “2015 Training Course on Bamboo Development for ITTO Member Countries” sponsored by Ministry of Commerce of China (MOFCOM) and organized by China National Bamboo Research Center (CBRC) from 18th May to 12th July 2015 at Hangzhou, Zhejiang province of China.
Dr. Vipin Kumar Chawla, Scientist has been deputed to take up the Collaborative Research Project on “Development of Glued bamboo materials for structural components based on European Standards” at Eberswalde University for Sustainable Development – University of Applied Science (HNEE), Germany from May-October 2015.

Dr. B.N. Mohanty, IFS, Director visited HNEE, Eberswalde, Germany and met Prof. Dr. Ulrich, Dean for exposure to their facilities, possible research collaboration and opine on the ongoing Bamboo research at HNEE during 04th to 08th August 2015.

Dr. B.N. Mohanty, IFS, Director, IPRTI, Bangalore attended the Executive Committee Meeting and 7th General Assembly of APAFRI and presented a paper in International Conference on Forestry and Forest Products at Kuala Lumpur, Malaysia during 20th – 23rd September, 2015.

IPIRTI is an Autonomous Research and Training Institute of the Ministry of Environment, Forest & Climate Change, Government of India. IPIRTI is the only training institute of its type in the country in the field of Wood and Panel Products Technology. In addition to Short Term Training Course, IPRTI conducts One Year PGD Course also.

This year 18 number of trainees are undergoing the PGDC-WPPT course (26th batch). Campus interview for the successful trainees will be arranged on 28th October 2015 at IPIRTI Campus. Wood based Industries in need of trained persons in middle management Cadre may write to Dr. V.K.Upadhyay, Head SORIT Division, IPIRTI, Bangalore. Tel. No. 080-30534049, E-mail to upadhyay@ipirti.gov.in
PGD Course:
26th batch of PGD Course on Wood and Panel Products Technology:

First Semester examination was conducted and result declared. Already Second Semester classes commenced.

As a part of PGDC, a study tour was arranged for the trainees during 31st August 2015 to 4th September 2015 in order to acquaint them with the manufacturing processes in wood based industries like M/s. Associate Décor Pvt. Ltd. Malur, M/s. Maheshwari Plywood, Mysore, M/s. Ferro Found-

**Short Term Vocational Training Courses:**

19.07.2015-21.07.2015: A Short term training course on “Resin Manufacturing Conventional PF & UF Resin” was conducted for 3 candidates from Plywood Industries at IPIRTI-Centre, Mohali.

03.08.2015-04.09.2015: One month short term training course on “Plywood Manufacturing Technology” was conducted for 5 candidates from Plywood Industries at IPIRTI Field Station, Kolkata.

21.09.2015-23.09.2015: A Short term training course on “Resin Manufacturing” was conducted for 5 candidates from Plywood Industries at IPIRTI Field Station, Kolkata.

**SHORT TERM TRAINING COURSES FOR OCT - DEC, 2015 AT BANGALORE**

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<tr>
<th>Sl. No.</th>
<th>Title Of The Training Course</th>
<th>Duration</th>
<th>Date</th>
<th>Fee</th>
<th>Tax*</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Low Formaldehyde Emission Adhesives for Plywood and Particle Board</td>
<td>5 Days</td>
<td>Oct 05-09</td>
<td>7500</td>
<td>1050</td>
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<td>2.</td>
<td>Defects and Remedial Measures In Plywood Manufacture</td>
<td>5 Days</td>
<td>Nov 16-20</td>
<td>7500</td>
<td>1050</td>
<td>8,550</td>
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<td>3.</td>
<td>Testing of Plywood and Block Board as Per IS:303, IS:710, IS:1328, IS:4990 And IS:1659</td>
<td>5 Days</td>
<td>Dec 14-18</td>
<td>10000</td>
<td>1400</td>
<td>11,400</td>
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</tbody>
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* 14% Service Tax

**Programme Coordinator:** Dr. V K Upadhyay, Head, IT & SORIT (upadhyay@ipirti.gov.in). You can apply online by filling and submitting the Registration Form (PDF)/Registration Form (doc). Registration has to be done 10 days before the date of commencement of the course by remitting prescribed course fee. Fees payable to the organization may be sent by crossed Demand Draft in favour of Director, IPIRTI, Bangalore and sent by post to Post Bag No.2273, Tumkur Road, Yeshwanthpur PO, Bangalore - 560 022.

**SHORT TERM TRAINING COURSES FOR OCT - DEC, 2015 AT MOHALI**

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<th>Fee</th>
<th>Tax*</th>
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<td>1.</td>
<td>Analysis of raw material for resin manufacturing</td>
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<td>2.</td>
<td>Testing Of Plywood As Per IS: 303, 1328, 710 &amp; 4990</td>
<td>5 days</td>
<td>02-06 Nov</td>
<td>5,000</td>
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* 14% Service Tax

**Lodging and Boarding are not included and have to be arranged by the trainees.

**Programme Coordinator:** Dr. Ranjana Yadav (ranjana@ipirti.gov.in) IPIRTI Centre (MoEF&CC, Govt of India)
B-65, Phase -7, Industrial Area, Mohali-160055, Punjab. Registration has to be done 10 days before the date of commencement of the course by remitting prescribed course fee. Fees payable to the organization may be sent by crossed Demand Draft in favour of Director, IPIRTI, Bangalore. You can apply online by filing and submitting the Registration Form.

**SHORT TERM TRAINING COURSES FOR OCT - DEC, 2015 AT KOLKATA**

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<th>Fee</th>
<th>Tax* (Rs.)</th>
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<td>3.</td>
<td>Preliminary Bamboo Processing</td>
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<td>4.</td>
<td>Plywood and Adhesive manufacturing</td>
<td>3 days</td>
<td>28- 30 Dec</td>
<td>5,000</td>
<td>700</td>
<td>5,700</td>
</tr>
</tbody>
</table>

* 14% Service Tax

** Programme Coordinator: Mr. Amitava Sil, IPIRTI Field Station Kolkata, 2/2 Biren Roy Road (West), Sarusun, Kolkata-61, Tele Fax:033-24983120, Mob:09874219758 (ipirti@vsnl.net). Registration has to be done 10 days before the date of commencement of the course by remitting prescribed course fee. Fees payable to the organization may be sent by crossed Demand Draft in favour of Director, Indian Plywood Industries Research & Training Institute. You can apply online by filing and submitting the Registration Form.
GLOBAL BAMBOO PIONEER AWARD TO DR. D. N. TEWARI,
(Hon’ble Member, IPIRTI BoG)

Dr. Dina Nath Tewari, President of Utthan: Centre for Sustainable Development & Poverty Alleviation Allahabad and also the BoG member of IPIRTI Society, has been awarded with “Global Bamboo Pioneer Award” by Ms. Susanne Lucas, Executive Director World Bamboo Organization on 21st September 2015, during the 10th World Bamboo congress, Damyang-Korea 2015, for his lifetime commitment and dedication to promote the benefits of bamboo.

He is a renowned expert who has dedicated his life work to bamboos, to boost local economic growth, address climate change and protect the natural environment for achieving Sustainable Development Goals. He recognized the multi-use of bamboo potentiality on energy, building, medicine, transportation, agro-forestry, nutrition and other modern innovative capacities.

He wrote a comprehensive monograph on bamboo, initiated “Bamboo Technology Mission” and “India’s National Bamboo Mission” to support research, exchange knowledge and improve communication on bamboo development for the sake of humanity.

He demonstrated that bamboo is the fastest growing plant which can compensate to a degree for the loss of forests, providing annual products, quick growth, rapid landscape restoration with a wealth of practical solutions to climate change for a greener future.

“Hearty congratulations” to Dr. D. N. Tewari, by Dr. B.N. Mohanty, Director and others staff members of IPIRTI Bangalore.

SUPERANNUATION

Smt C. S. Lalithamba, Technical Officer (Library) and Associate Editor, of “IPIRTI NEWS” retired on 31st August 2015. The Institute acknowledges her contribution especially in Library and Information Services.

IPIRTIANS wishes her a Happy & Peaceful Retired Life.

Supervision and Guidance: Dr. B. N. Mohanty, IFS, Director, IPIRTI, Bangalore