Commercialization of technology - An initiative towards end to end approach



Signing and exchange of MoA between Dr. N. Krishna Kumar, Director, IFGTB and Dr. Purnima Sharma, CEO, BCIL

Biotechnology applications in forest-based industrial sector are still in early stages of development. Only few biotech derived products and processes are globally commercialized mostly in areas of pest management and pulp and paper processing. The applications of high throughput technologies are being continuously incorporated in different areas of forest biotechnology. The significance of genomic research in forest trees is now being realized and a multitude of programs are being undertaken world over to understand the molecular complexities of woody perennials.

The first step in any genomics research is to obtain un-degraded high quality nucleic acid (both DNA and RNA) from different tissues. However, the difficulty in obtaining un-degraded nucleic acid specifically ribonucleic acid (RNA) from tissues with high phenolic content as in tree species is well documented. Hence, a low cost, high recovery technology was developed for the isolation of RNA from difficult tissues using non-biohazardous chemicals at Institute of Forest

Genetics and Tree Breeding (IFGTB), Coimbatore. The complete specification of the process was filed as a joint patent of IFGTB – DBT (Application No. 1927/CHE/2009). The inventors of the technology are Dr. Modhumita Dasgupta, Scientist E and Ms. Radha Veluthakkal, Research Fellow of IFGTB. The technology was assessed for its market viability by Biotech Consortium India Limited (BCIL), New Delhi and the process was defined to have high demand in R&D market. Subsequently, the commercialization of the technology was taken up with BCIL, which is a public limited company promoted by the Department of Biotechnology, Government of India and financed by the All India financial institutions and corporate sector. BCIL has core competency in IP management, technology transfer, certification services and in biosafety issues.

Dr. Purnima Sharma, Managing Director & CEO, BCIL had visited IFGTB on 10th October 2011



and signed the Memorandum of Agreement between IFGTB and BCIL to facilitate the transfer of the technology titled "Isolation of nucleic acid from plant tissues" to biotech based industries. Dr. N. Krishna Kumar, Director, IFGTB signed the MoA on behalf of

the Institute. Dr. Modhumita Dasgupta, Scientist, IFGTB signed the document as one of the



inventor of the technology. Dr. Sharma also addressed the scientists, officers and research fellows of the Institute on the importance of intellectual property, its effective management and technology transfer towards economic sustainability. This is the

first initiative of the Institute on technology transfer to Biotech Industries.

A brief presentation on the draft IP policy at IFGTB and presented by Dr. Modhumita Dasgupta and the event marked the conceptualization of the IP Management Cell at IFGTB.