A report on webinar conducted on

**ELECTRIC RESISTANCE TOMOGRAPH: A TECHNOLOGY IN DECIPHERING THE INTERIORS OF STANDING TREES**

Under **Azadi Ka Amrit Mahotsav** on 4th January 2022

The occasion graced by the presence of Director, GCR and all other heads of the department. Dr. B.N. Divakara, Scientist – F, SFM organised the webinar and 67 participants participated in the webinar. Dr. A.N. Arun Kumar, Head and Scientist- G, SFM division welcomed all the participants and inaugural remarks was delivered by Shri. V. Shetteppanavar IFS, Group Coordinator (Research). Dr. M.P. Singh IFS, Director IWST presented the inaugural address by motivating all participants for fruitful interaction.

Dr. S.R. Shukla, Scientist – G, IWST, Bengaluru presented on “Differentiating properties of heartwood and sapwood”. In his presentation he explained about the properties of sapwood and heartwood of few commercially important timber species.

Dr. Anil Kumar Shetty, Scientist – E, IWST, Bengaluru presented on “Wood quality and it's effect on electrical properties of wood”. He briefed about the DC electrical resistance of material and explained the effect of various wood quality parameters such as moisture content, density, grain direction and chemical constituents on electrical properties of wood. The differential electrical properties of sapwood and heartwood was also described in relation to the variation in wood moisture as well as extractive content.

Dr. B. N. Divakara, Scientist – F, IWST, Bengaluru presented on “Electric Resistance Tomograph (ERT): A technology in deciphering the interiors of standing trees”. In his presentation Dr. Divakara explained about ERT as an advanced non-destructive tool customized tree specific novel German-technology. He explained about ERT as a technology in understanding the inner structure by giving the greater resolution with accurate precision in estimating the heartwood, sapwood and decay in the standing trees by taking example of Sandalwood (Santalum album) and Red sander (Pterocarpus santalinus).

During discussion, participants appreciated the programme and were interested to know more about the application of ERT in teak plantations and AF systems to estimated heartwood content of standing trees. Participants were also interested in application of ERT in estimation of fungal infection in agarwood trees. All the queries were answered as a part of discussion.

Vote of thanks was rendered by Smt. P.R. Triveni. CTO, IWST.