



**Technology
Development
Board**

Department of Science & Technology



Technology Development Board

supports

M/s Panacea Medical Technologies Pvt. Ltd., Bangalore

for

"Development & Commercialization of "S Band Tunable Magnetron for Particle Accelerators."



Agreement Signed on 25.05.2022

Technology Development Board, an invisible thread in the development of the Indian Healthcare Ecosystem is providing an impetus to India's vision of becoming a global manufacturing hub for medical devices. TDB has signed an agreement with M/s Panacea Medical Technologies Pvt. Ltd., Bangalore to provide financial support for development and commercialisation of "S Band Tunable Magnetron for Particle Accelerators". The board has agreed to provide loan assistance of ₹4.87 crores, out of the total project cost of ₹9.73 crores to the company.

Magnetron is a type of vacuum tube device. It is compact & low-cost source of microwave power as compared to other similar microwave tubes. It works on a principle of crossed-field device, which uses the motion of electrons in perpendicular electric and magnetic fields to generate microwave radiation, used for generating RF Power Source in Linear Accelerator for Medical, NDT & other allied applications. This technology has been developed indigenously by CSIR-CEERI, and transferred to Panacea for mass production and usage in radiation therapy machine for cancer treatment.