Laser induced damage threshold (LIDT) measurement facility

LIDT set up was designed and developed indigenously to measure laser induces damage threshold of multilayer devices and optical components. Damage onset is measured in terms of change in transmission/reflection and physical change in morphology of the area irradiated by the pump laser. Q-switched nano second Nd:YAG pulsed laser with all 5 harmonics is employed as pump laser in the set-up. He-Ne laser and fiber based spectrometers are used to probe damage onset. The current set-up is being upgraded to measure absorption in optical components/multilayers accurately and precisely.