

WONDERS OF THE OPTICAL FIBER

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Telecommunication networks across the globe have been revolutionized with the deployment of optical fibers. Owing to the demand of present days internet services and access networks, fiber optic networks are expanding at a faster rate. The basic optical fiber material is high purity silica glass. Most of the technologies are now perfected and research is now directed towards new highly transparent materials for getting larger bandwidth. Recent development of photonic crystal fiber has shown tremendous benefit to medical sciences. Year 2015 has been proclaimed as the International Year of Light and Light-based Technologies by The United Nations General Assembly in order to campaign for optics and photonics research around the globe. Part of this article has been published in the journal - Transactions of the Indian Ceramic Society in December, 2014. Applications of guided medium, optical fiber and photonic crystal fiber will be described.
