

## FIBER OPTICS AND THE FUTURE

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Considerable effort has been expended over the past 17 years in both technological and fundamental investigations pertaining to the field of fiber optics. Only recently some fiber optics devices have become an economic reality. However, there still remains considerable fertile ground to be exploited in the field of fiber optics, both from a theoretical, as well as technological, standpoint. Complex assemblies of fibers to perform numerous static scanning functions have not been fully realized as yet because of technical complexities and high cost. It is expected that light transmission, image quality, extension of spectral range, and physical ruggedness of fiber optics will see significant improvements.

The evaluation and specifications of various fiber optics configurations are in a confused state at present, and more standard and generally acceptable methods need to be evolved. The applications and technology of "active" fibers are expected to evolve from the laboratory stage into practical devices. It is believed that the field of fiber optics is now at the threshold of burgeoning growth with applications in high quality inspection and medical devices, night vision components and electron optical devices, photography, inexpensive illumination systems and light pipe assemblies for numerous scanning functions.