

# DESIGN OF OVERMODED WAVEGUIDE COMPONENTS

**Innovations and Benefits** - Efficient Guided transmission of electromagnetic energy at microwave and THz frequencies. The development of low-loss guided transmission technology allows to increase the power transmitted and reduce the related costs. Similar technologies under registered trademark have already been applied to satellite uplinks and radar surveillance systems in airports.

**Uses** - Application of the acquired know-how to satellite communications, radar, particle accelerators, power beaming, directed energy weapons, modification of atmosphere.

**Past and Present Activities** - Current applications: RF systems transmission lines for thermonuclear fusion. Underway: design and development of converters, curves, tapers and mode filters.

