

The Large Volume Microwave Plasma Generator: A New Tool for Plasma Chemical Research

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The Large Volume Microwave Plasma Generator (LMPTM) employs a new technique for producing microwave plasmas: microwave energy is coupled into the plasma by means of a slow wave structure, and uniform plasmas well in excess of 1000 cm³ can readily be achieved with 2.5 kW of microwave power at 2.45 GHz. General operating characteristics and some experimental data for the dissociation reaction of O₂ and N₂ are presented, and various promising applications are discussed.