

COMPOSITIONAL ANALYSIS OF GREEN TEA LEAVES USING LASER INDUCED BREAKDOWN SPECTROSCOPY (LIBS)

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Green tea is a type of tea made from the leaves and buds of *Camellia sinensis*. To ensure the interests of Green Tea producers and consumers the precise identification of tea varieties is of great significance. Thus, Laser-induced breakdown (LIB) Spectra of Green tea have been recorded for the its compositional analysis. LIB Spectra of the sample shows the presence of molecular bands of CN and C₂ molecule in addition to the spectral signature of the elements like Carbon(C), Manganese (Mn), Magnesium (Mg), Iron (Fe), Aluminium (Al) etc. The concentration of C and N is corelated to the atomic lines of C and N and molecular band of CN and C₂. Thus, the results of present work reveal that LIBS technique is a direct, straight forward and easy method for detection of elements and some specified molecule present in the sample.