

TIPST 22

Espectrometro LIBS ultracompacto.

M. T. Martínez, L. Ponce
Centro de Investigación en Ciencia Aplicada y Tecnología Avanzada, Unidad Altamira.
Instituto Politécnico Nacional
Km 14,5 Carretera Tampico puerto Industrial, Altamira 89600, Tamps, México.

ABSTRACT:

The thesis work proposed is the development of a new ultra-compact LIBS system, designed to express analysis, real-time and qualitative of the composition of samples of industrial interest such as minerals and /or contaminated surfaces. The system involves using a pulsed Nd:YAG with commutator Q: Switch built into the active medium, which ensures greater compactness and robustness of the resonator. This laser emits pulses of light formed by a series of short pulses of 5-20 ns duration each, a practice that contributes to improving the quality of detection.

Key words: LIBS, analysis, compactness