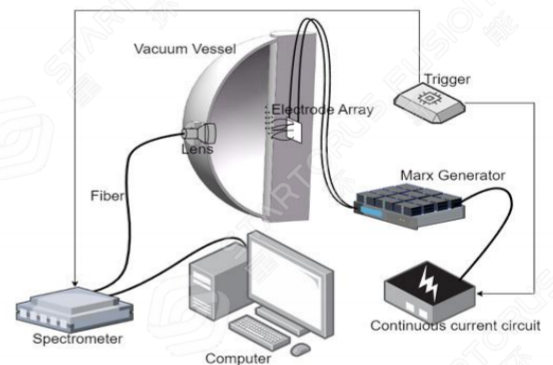


# Spark Optical Emission Spectroscopy (Spark OES)

## Introduction

Spark Optical Emission Spectroscopy (Spark OES) involves placing detection electrodes in a vacuum chamber, applying high-voltage pulses to generate a spark that ablates the solid surface and creating a plasma. By collecting and analyzing the plasma spectrum, information on changes in the composition of the solid surface can be obtained, enabling real-time, in-situ diagnostics of the vacuum chamber surface.

The technology serves as a complement to LIBS and offers advantages such as portability, freedom from window view angle restrictions, and independence from window transmission effects, making it a valuable tool for surface diagnostics.



## Parameters

- Maximum output voltage of pulse power supply: -10 kV
- Discharge energy: 5~12.2 J, continuously adjustable
- Spectral wavelength range: 400~716 nm

## Applications

Spark Optical Emission Spectroscopy can be applied for real-time composition diagnostics of solid surfaces within vacuum chambers and similar scenarios.