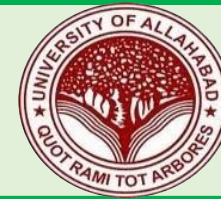




P5674 COMPOSITIONAL ANALYSIS OF AYURVEDIC MEDICINE USING LIBS ALONG WITH PAS TECHNIQUES



RESHU KUMARI, ZAINAB GAZALI, ABHISHEK DWIVEDI, A. K. RAI, University of Allahabad, India

An ayurvedic medicine has been taken to know its complete compositional (elements and molecules) profile. This medicine enriched with *Salacia oblonga*, a herbs, that exhibits antidiabetic properties.

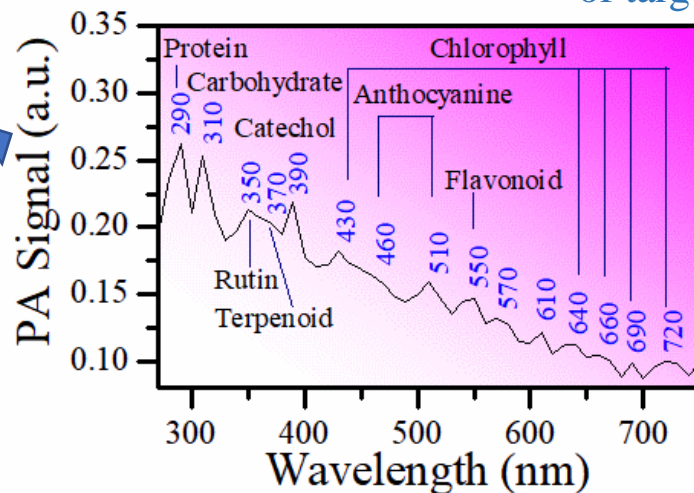
Two analytical techniques have been used

Photoacoustic Spectroscopy
(PAS)

Laser Induced Breakdown
Spectroscopy (LIBS)

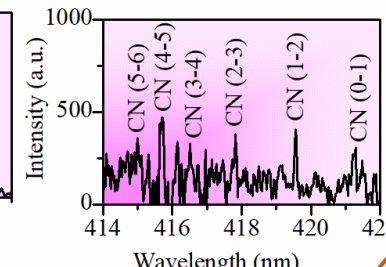
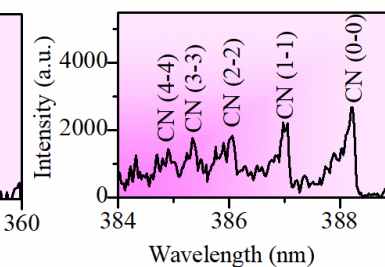
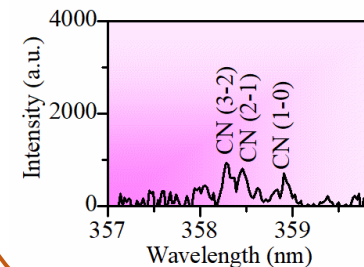
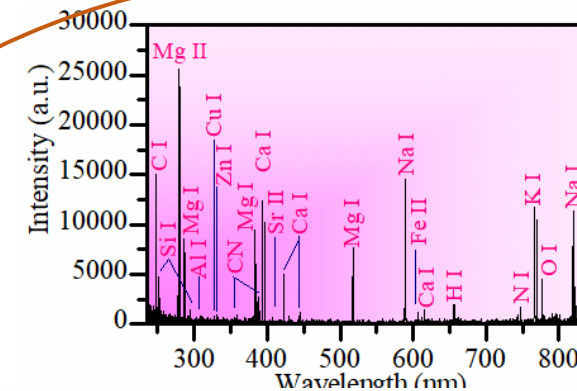
PAS is based on the detection of photon-induced acoustic (PA) signals generated via non-radiative transition processes.

Based on the analysis of spectral lines of elements emitted from laser-induced plasma created on the surface of target sample



PAS spectrum of the Ayurvedic Medicine with in the wavelength range from 270 nm - 750 nm

The organic elements (C, H, N and O) and CN molecular band are present due to photo fragments of the organic molecules present in the medicine



LIBS spectrum of the Ayurvedic Medicine

The feasibility of LIBS and PAS have been demonstrated as a rapid analytical tool for the complete compositional confirmation of Ayurvedic medicine and boost the trust of consumer towards the consumption of traditional medicine