

# Composition Analysis of foreign substances by Laser Raman spectroscopy

Chemical structures of foreign substances are obtained by laser Raman spectroscopy, with several to sub micron spatial resolution.

## Characteristics of Raman spectroscopy

### High spatial resolution

Spatial resolution is about 1 micrometer, one order higher than Infrared spectroscopy, using visible to near infrared lasers.

### Non destructive analysis

Non destructive analysis is possible for foreign substances which is various in forms, existing on films, buried under resin molding.

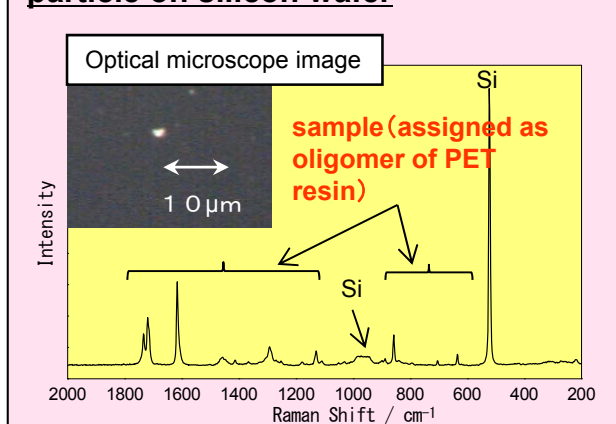
### Pigment analysis with resonant Raman effect

Selective detection of pigment is possible using resonant Raman effect.

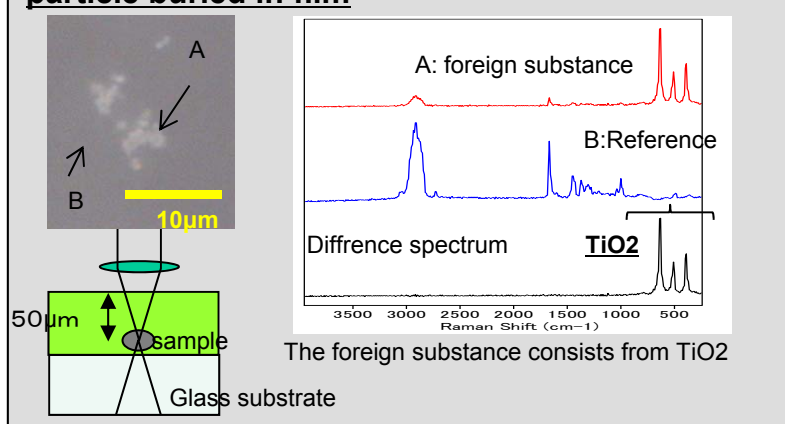
Characteristics	
Information obtained	Molecular structure
Spatial resolution	1 $\mu$ m
Experimental feature	Non destructive
Applicable samples	Inorganics, colored materials

## Case Examples

### particle on silicon wafer



### particle buried in film



### Black spot on tablet

