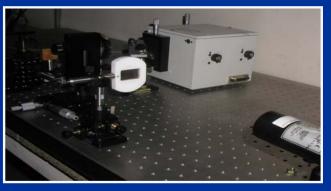
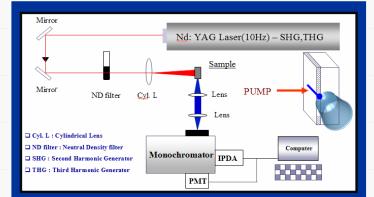
# **Optical Pumping (Stimulated Emission) System**

## **Optical Pumping (SE)**





## **Optical Pumping Schematic**

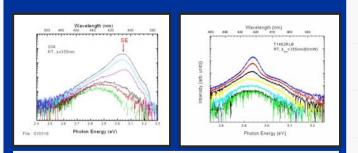


### System features :

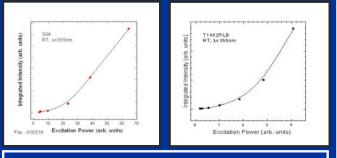
• The optical pumping method has been widely used for studying SE and lasing phenomena, since it can generate sufficiently high carrier densities necessary for the onset of SE and lasing without electrical contacts on samples so that somewhat complicated doping and device processing procedures are "not" required.

Nd:YAG laser with 3th harmonic 266 nm line
Intensify Photo Diode Array (IPDA) detector.

# SE Spectra



# • SE spectra can observed to change from spontaneous to stimulated emission.



 Current and related-EL intensity characteristic of LD sample is shown.

### **Optically Pumped SE and Lasing**

The optical pumping method has been widely used for studying SE and lasing phenomena,

#### since

it can generate sufficiently high carrier densities necessary for the onset of SE and lasing without electrical contacts on samples

so that somewhat complicated doping and device processing procedures are "not" required.

Reduce Time and Cost !!