

# IP MARKETPLACE

## CONNECTING INNOVATION TO YOUR BUSINESS

### TECH OFFER

## Thermo Activated Photon Wavelength Spectrometer



### ▶ MORE INFORMATION

#### MEGA-TREND

- Healthcare
- Measurement and Instrumentation

#### TECHNOLOGY READINESS LEVEL (TRL)

- TRL 7

#### PATENT/ GRANTED NUMBER

- PI 2016702615

### ▶ TECHNOLOGY OVERVIEW

The present invention provides a design of a thermoluminescence spectrometer capable of measuring luminescence via its photon wavelength or energy emitted from a test object when heated at pre-determined interval using ceramic heat heater to provide heat and adjust the temperature with precision. The luminescence spectra is later dispersed using spectrograph and detected by highly sensitive cooled CCD which is capable to measure very small light intensity. This invention consists of three main components, which are the heater chamber, the spectrograph for dispersion of wavelength or energy and the detection of array by highly sensitive CCD.

This design is researched and invented to improve analysis on material trap depth, energy-wavelength dependency and efficiency of the luminescence process for more accurate and yet affordable thermoluminescence detector system.

---

## CONTACT US!

Dr. Lee Ching Shya

UMCIE Business Officer

Email: [leecs@um.edu.my](mailto:leecs@um.edu.my)

Phone: +603 – 7967 7351 / 7352