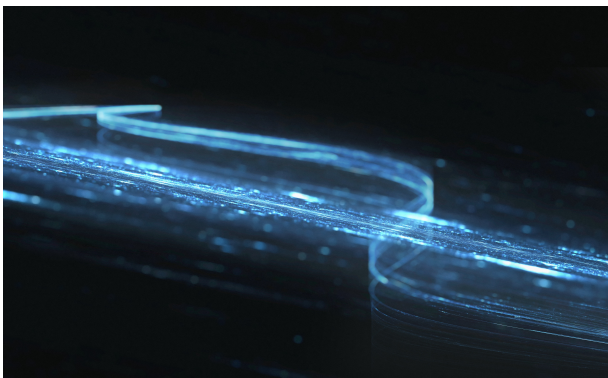


# IP MARKETPLACE

## CONNECTING INNOVATION TO YOUR BUSINESS

### TECH OFFER

## Environmental Parameters Monitoring In an Analyte



### ▶ MORE INFORMATION

#### MEGA-TREND

- Environment and Water
- Innovative Technologies of the Future

#### TECHNOLOGY READINESS LEVEL (TRL)

- TRL 3

#### PATENT/ GRANTED NUMBER

- UI 2016702744

### ▶ TECHNOLOGY OVERVIEW

The present invention relates to an improved apparatus for monitoring environmental parameters in an analyte. The apparatus preferably comprises an amplified spontaneous emission light source coupled to one end of an optical fiber cable configured for transmitting an input signal; an optical spectrum analyzer coupled to another end of the optical fiber cable for receiving and monitoring an output light signal; and a non-adiabatic tapered optical fiber sensor configured in a solution chamber connected between the amplified spontaneous light source and the optical spectrum analyzer by the optical fiber cable for producing the output signal having different reactive index of core and cladding modes. The output signal is measured to obtain spectral shift and absorption. Spectral shift and absorption are jointly used for observing concentration of the analyte whose temperature is elevated above a room temperature for compensating temperature variation of up to 50C in the analyte.

## CONTACT US!

Dr. Lee Ching Shya, RTTP

UMCIE Business Officer

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

Phone: +603 – 7967 7352 / 013-2250151