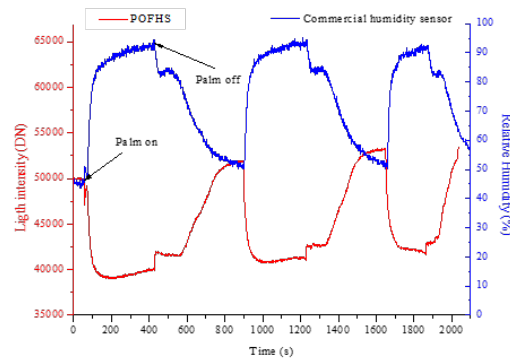
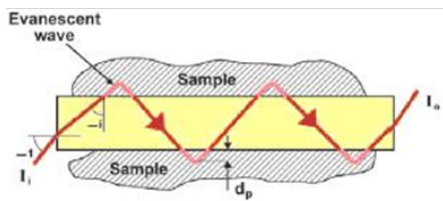




## Optics and Photonics Group Lunchtime Seminar

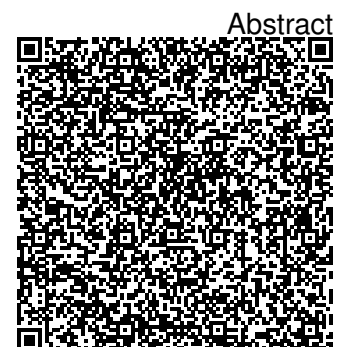
# “Polymeric optical fibre sensor for humidity sensing in the skin microenvironment”

David Gomez



12:00pm Thursday 8th December 2016  
Lecture Theatre 203 Tower Building  
All Welcome

[http://optics.nottingham.ac.uk/wiki/Talks\\_2016](http://optics.nottingham.ac.uk/wiki/Talks_2016)



Abstract

# “Polymeric optical fibre sensor for humidity sensing in the skin microenvironment”

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In this research, the fabrication of a low-cost polymeric optical fibre humidity sensor based on evanescent wave absorption is presented. The sensor is coated with a hydrophilic film on the unclad section of the fibre. It has been observed a decrement in light transmission as relative humidity increases as a result of refractive index changes of the coating deposited onto the optical fibre.

The polymeric optical fibre sensor developed has the potential to be incorporated into textiles in order to monitor humidity of the skin microenvironment which can be used to provide better prognosis in the wound healing process.