Applications in Terahertz Imaging and Spectroscopy

By

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Time: 1.00pm to 2.00pm
Venue: Hilbert Space (PAP-02-02)
Host: Asst. Prof. Elbert Chia

Abstract:

The terahertz (THz) region of the electromagnetic (EM) spectrum is commonly defined as spanning 0.1 THz to 10 THz. This region is of particular interest as many solids, liquids and gases have resonances in this area, the radiation is low energy (non-ionising) and can penetrate many common materials such as plastics, papers and ceramics. In the last decade the advent of commercially available turn key terahertz spectroscopy and imaging systems has unlocked this rich area of the EM spectrum. Terahertz imaging and spectroscopy techniques are now commonly used in a wide variety of fields ranging from medical, security and pharmaceutics to art restoration and non-destructive testing of space shuttle foam. Here I will present an overview of the technology and applications that TeraView are currently involved in.