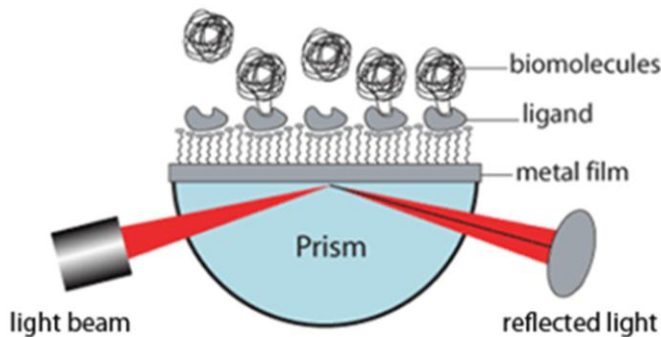


# PIEAS Colloquium

## Structured Illumination Microscopy via Surface Plasmons



*By*

**Dr Muhammad Suhail Zubairy**

**Institute for Quantum Science and Engineering**

**Department of Physics & Astronomy,**

**Texas A&M University, College Station,**

**Texas, USA**

*on*

**Tuesday, December 11, 2018**

*at*

**11:00 am**

*in*

**Teleconference Hall, A-Block**

***All are cordially invited***

**Contact Person:** Dr Masroor Ikram

Director Academics, PIEAS, Tel.: 051-9248705

email: [masroor@pieas.edu.pk](mailto:masroor@pieas.edu.pk)

[www.pieas.edu.pk](http://www.pieas.edu.pk)



Dr. M. Suhail Zubairy is a University Distinguished Professor of Physics and the holder of the Munnerlyn-Heep Chair in Quantum Optics at the Texas A&M University. He received his Ph.D. from the University of Rochester in 1978. He served as Professor of Electronics and the founding Chairman of the Department of Electronics at the Quaid-i-Azam University before joining Texas A&M University in 2000. Prof. Zubairy's research interests include quantum optics and laser physics.

In the PIEAS Colloquium he will talk on structured illumination microscopy via surface plasmons. In optical microscopy, diffraction limits the precision with which one can localize an object. In this talk, he will present a high-resolution method, the structured illumination microscopy (SIM) that has been of special interest in high precision imaging in recent years. Linear SIM was realized nearly 20 years ago but with resolution limitation. In this talk he will discuss how high precision imaging can be achieved in linear SIM using surface plasmons