

## OPEN SEMINAR SERIES

**Wednesday 2 May 2018**

**10:30 – 11:30**

**SEERC Conference Room,  
Koromila Building**

### **"Sustainable Functional Materials"**

**By**

**Prof Ian M Reaney,**

**Department of Materials Science and Engineering,  
TUoS**

#### **Prof Reaney's profile**

The main theme of Prof. Reaney's research is the use of analytical and high resolution transmission electron microscopy to study the structure and microstructure of electroceramics. He has specialised in recent years in the study of microwave and piezoelectric materials in which fields he has many key papers. His research activities are mainly concerned with materials and devices for sensor and actuator applications as well as dielectric resonators and antennas for microwave communications. He also has an active interest in bioactive glass ceramics for bone augmentation.

Recently his research highlights include:

1. Fabrication of a new multilayer GeoHelix® antenna for multiband satellite receive only handsets in collaboration with Sarantel (now part of the Maruwa)
2. Discovery of a new PbZrO<sub>3</sub> structured AFE based on Nd-doped BiFeO<sub>3</sub>
3. Fabrication of new high temperature piezoelectric multilayer actuators
4. Facilitated the transfer of oxide deposition technology to Ilika Technology Ltd which helped their growth towards a public limited company in 2011
5. Discovered a new tunable dielectric based on Pb-niobate pyrochlore with superior properties to existing compositions

**The seminar series is open to all members of *staff* and *students* of CITY and to any *externals* that wish to attend.**