

# LTD Capacities and Facilities

High voltage (30kV, 1.2mA) static discharge measurements for: Discharged energy density, permittivity as a function of field, electrical breakdown testing, leakage current.

Supercapacitor cyclability testing (5V, 5A).

Battery/supercap testing (coin cell, swagelock, 2+3 electrode systems)

Oven (300C).

Box Furnace (1600C).

Tube Furnace (1200C) – inert/controlled atmosphere.

Solid state ceramic processing: Roller ball mill, pellet press, furnaces.

Engineering (Mechanical, Electronics & Software).

## **ALD & clean room services**

Ellipsometry services, including mapping

ALD depositions

Potential applications (Picosun white papers):

Mechanical component protection

Concentrated photovoltaic systems (Al2O3 films)

Optics

Corrosion Protection

Electronic Board Protection

Impedance spectroscopy (40 Hz – 110 MHz 4294A Precision Impedance Analyzer) up to 400C

IV testing 0 – 40 V (2601B – Source Measure Unit)

SEM/EDX

Glovebox

Particle counter

## **Contract R&D**

Consultancy/report writing/literature reviews

Materials development