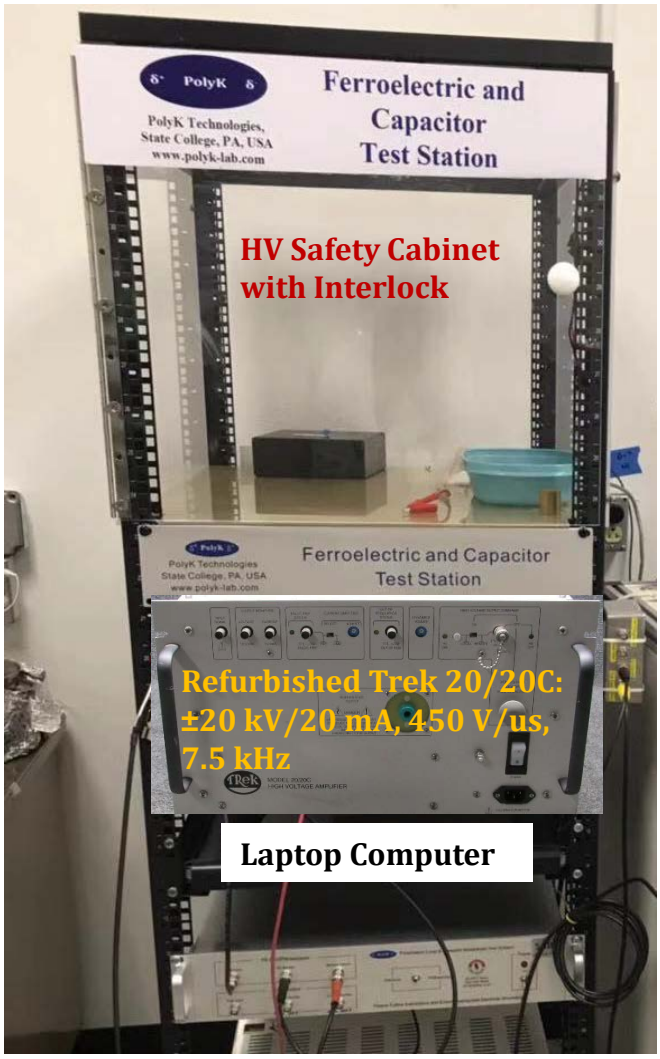
Ferroelectric Polarization Loop & Dielectric Breakdown Test System

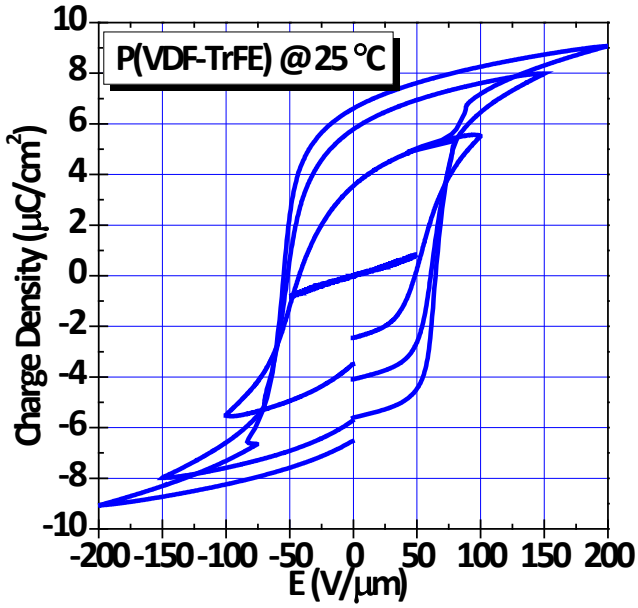


Special Deal $25,000: 10 kHz Ferroelectric PE Loop Test system with refurbished 20 kV Trek amplifier, with test fixture, laptop, HV Safety Cabinet with Interlock.

Functions

- General ferroelectric test functions such as
  - Bipolar and unipolar hysteresis hoop
  - PM – PUND measurement
  - FM – Fatigue measurement
- This test system can measure the electrical charge density of dielectric and ferroelectric materials as a function of electrical field and frequency.
- The system has integrated protection circuit to protect the system even when the test specimens experience dielectric breakdown under high voltage.
- Working with external high voltage amplifier, test can be performed at voltage 20 kV. No HV interface required.
- Uniquely designed test fixture will not damage soft polymer dielectric materials.

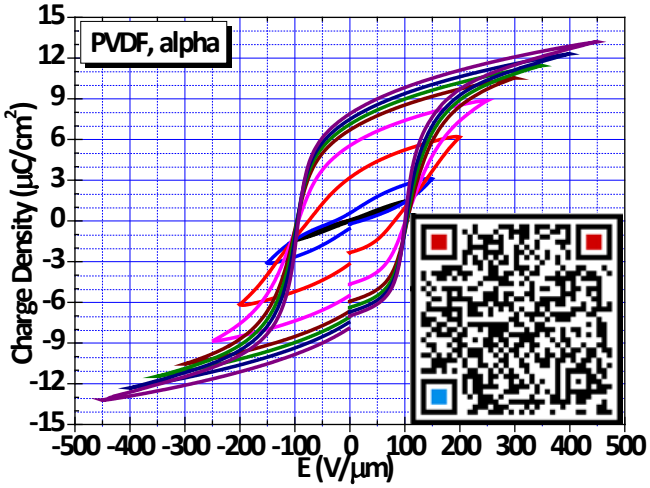
1. Dielectric breakdown test under AC, DC or field endurance life.
2. Automatic ferroelectric test until dielectric breakdown
3. Poling of piezo materials

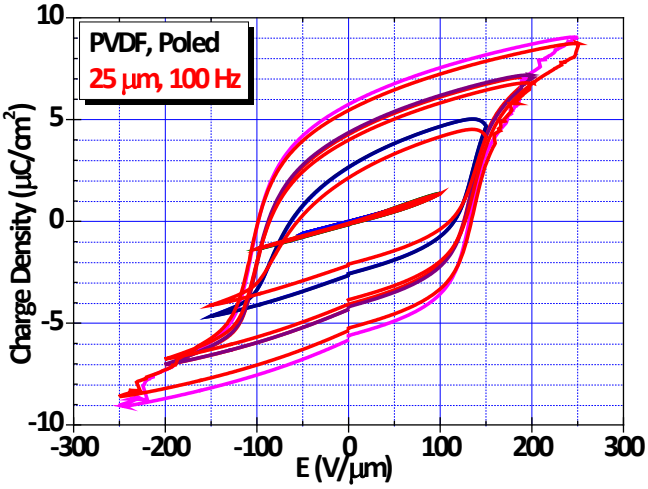


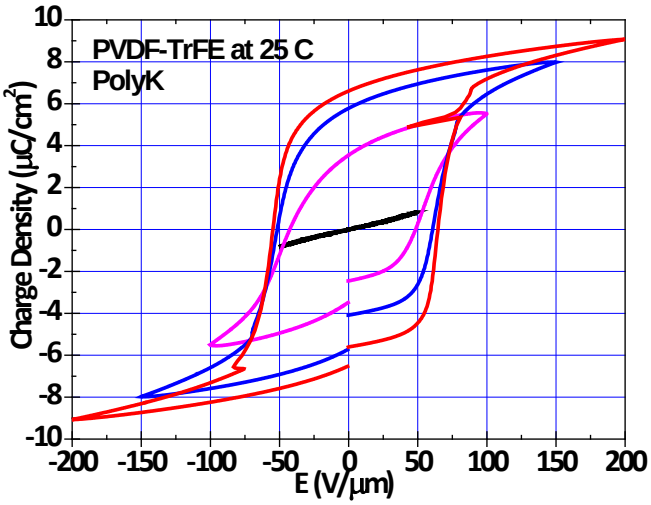
- Internal ±100 V or ±200 V amplifier
- Voltage: ± 20 kV / 20 mA
- Charges: <1 nC to >1 mC
- Frequency: 0.01 ~ 10 kHz [CPE1901]
- Provide TWO Sensor input to measure piezo strain response (recommend low cost fotonic sensor with resolution below 10 nm) or Magnetoelectric option

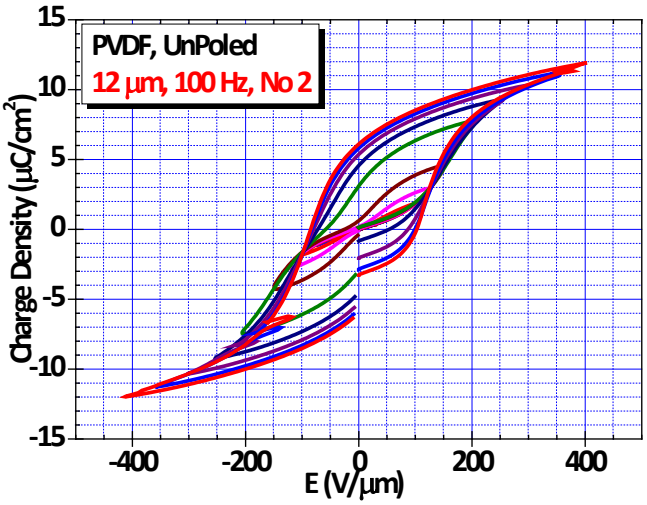
PolyK Technologies, State College, PA, USA;
sale@polyk-lab.com www.piezopvdf.com

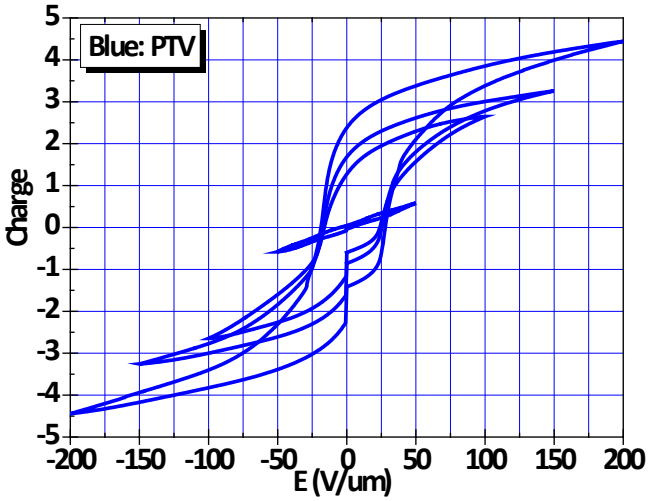
Test Examples

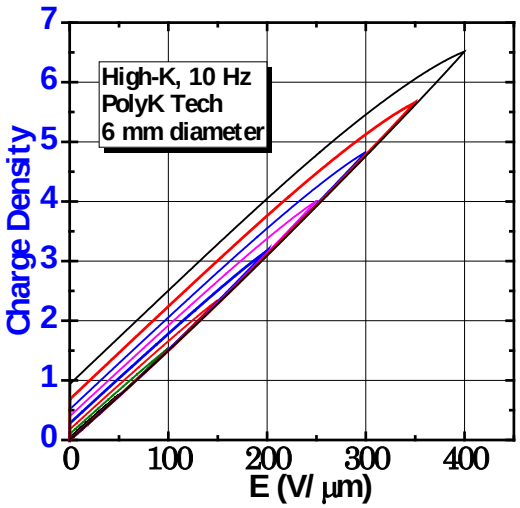












Contact Information:
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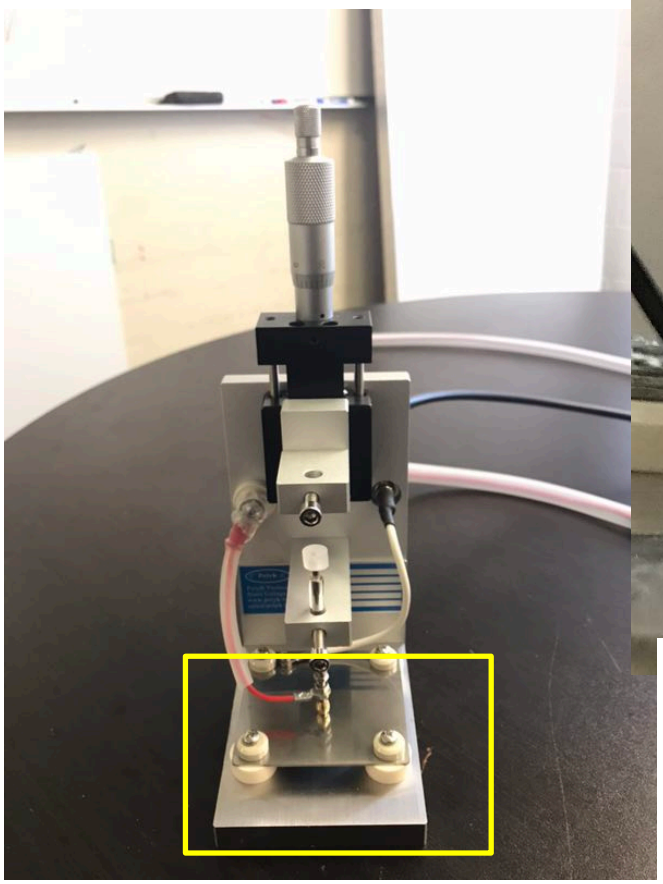
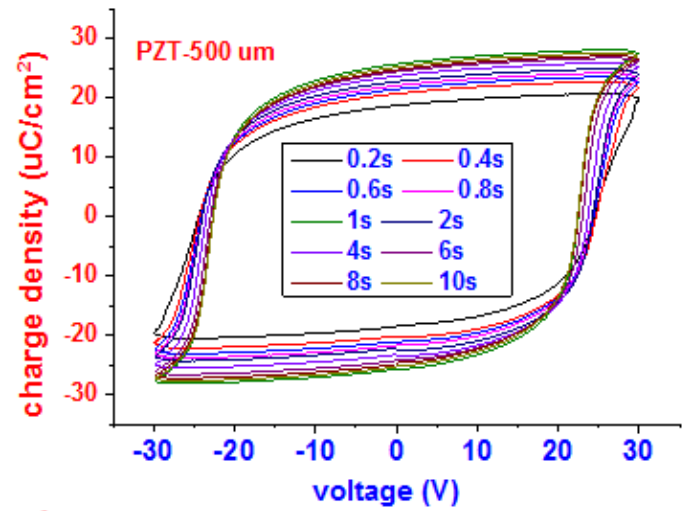
www.polyktech.com www.piezopvdf.com

Low Cost Test System for Ferroelectric & Strain

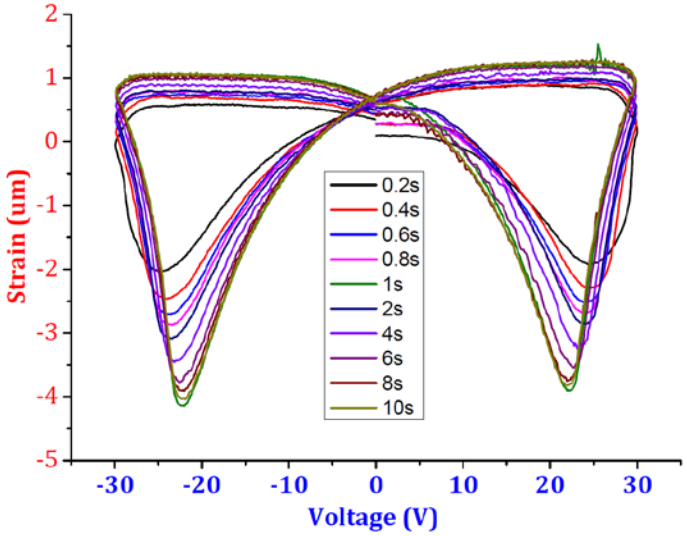
δ+ PolyK δ-





- For bulk ceramic and polymer sample. Measure ferroelectric charge and piezo strain response.
- Probe station will be provided for thin film test

- This sample holder can be soaked in hot silicone oil for high temperature measurement with low cost.



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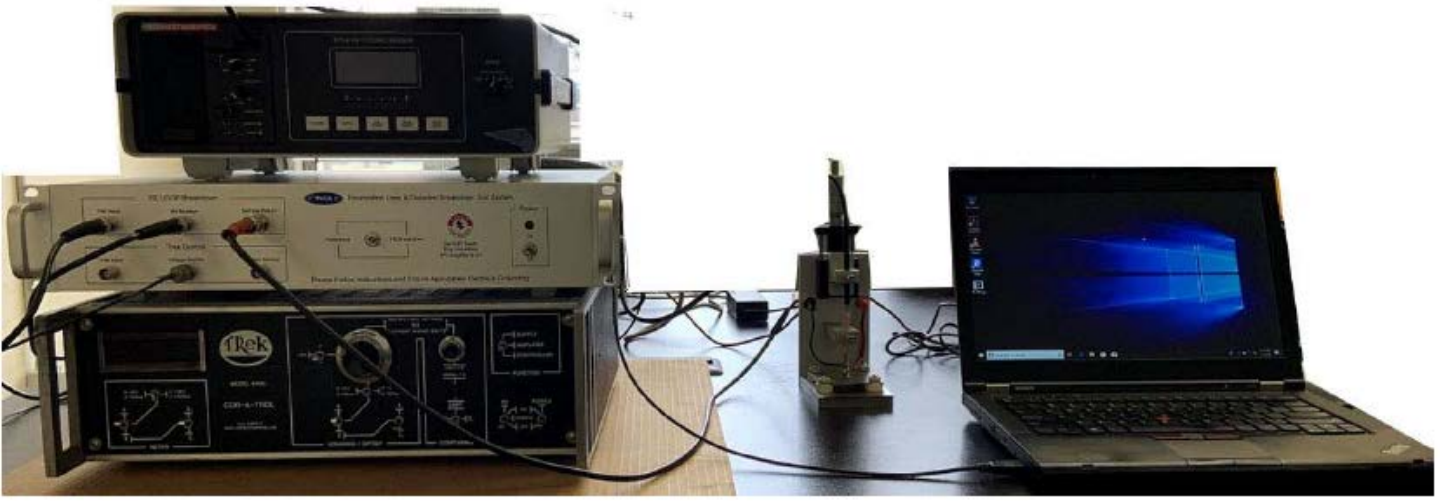
Piezoelectric Displacement Strain Test



- The Test System consists of:
  1. MIT 2100 Fotonic Sensor System
  2. PolyK Ferroelectric Test System (including computer)
  3. A Trek high voltage amplifier
  4. PolyK strain measurement fixture
  5. A laptop