

## **Manufacturing process for Piezocomposites Transducers elements**

PZT-Polymer Composite (Piezocomposite) elements and linear arrays for advanced sonar transducers have been developed by NMRL, as a high promise alternative for conventionally used PZT piezoceramic material having the limitations like high acoustic impedance, higher weight factor and poor mechanical properties. The Piezocomposite based sonar transducers exhibit enhanced receiving and transmitting response over a large frequency bandwidth and narrow beamwidth.

### **Salient Features**

- Low acoustic impedance
- Wide range of dielectric constants
- Ease of dividing into acoustically isolated array elements
- Formability to curved shapes

### **Areas of Application**

- Transducer arrays for Ship Wake Measurement
- Miniaturized FET-Piezocomposite Hydrophones
- Thin Line Towed Array
- High frequency sonar transducers