

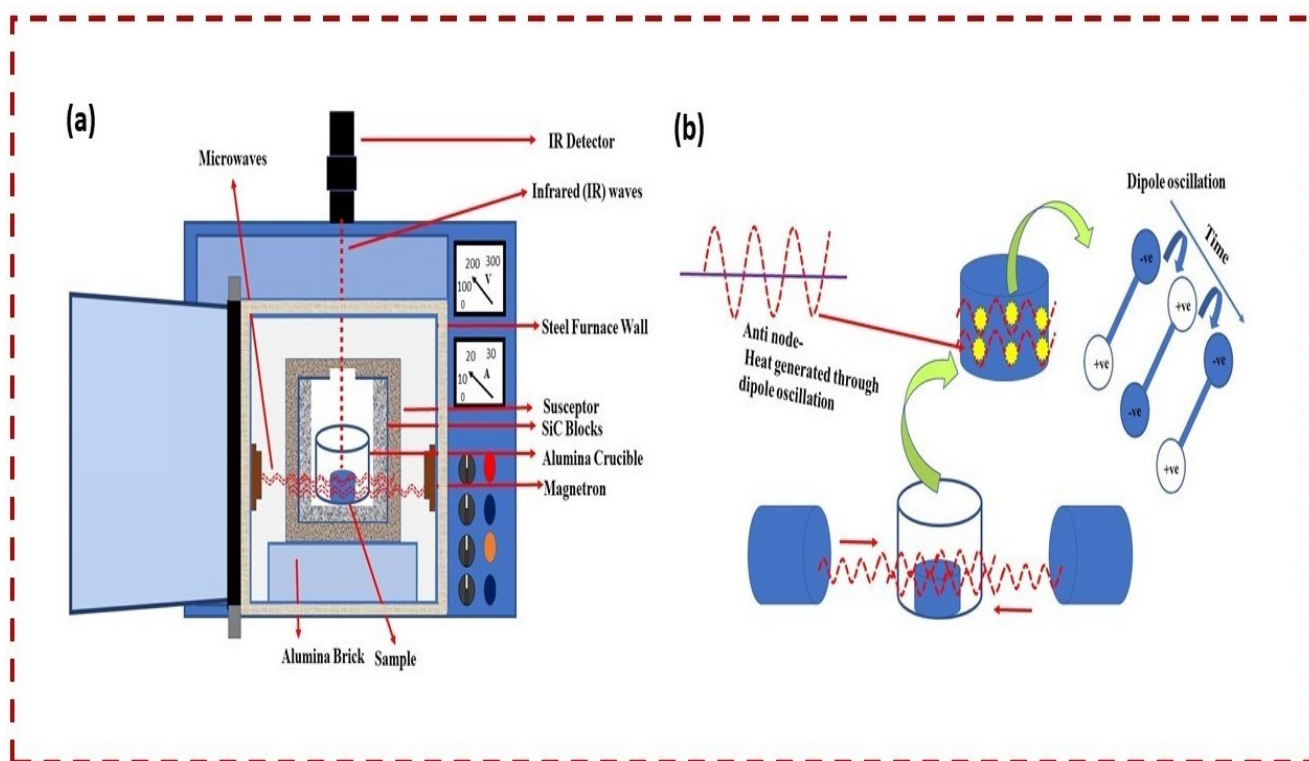
## Hybrid microwave sintered PZT composite as flexible piezoelectric nanogenerator

Thirumalasetty Avanish Babu<sup>a</sup>, Wuppulluri Madhuri<sup>\*b</sup>

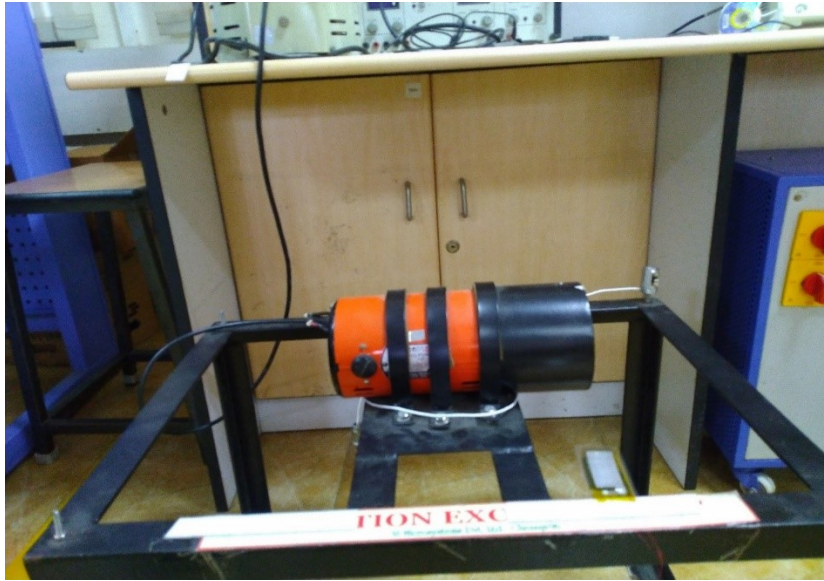
<sup>a</sup>Department of physics, School of Advanced Sciences, Vellore Institute of Technology, Vellore, 632014, Tamilnadu, India.

<sup>\*b</sup>Ceramic Composites Laboratory, Centre for Functional Materials, SAS, VIT, Vellore-632014, Tamilnadu, India.

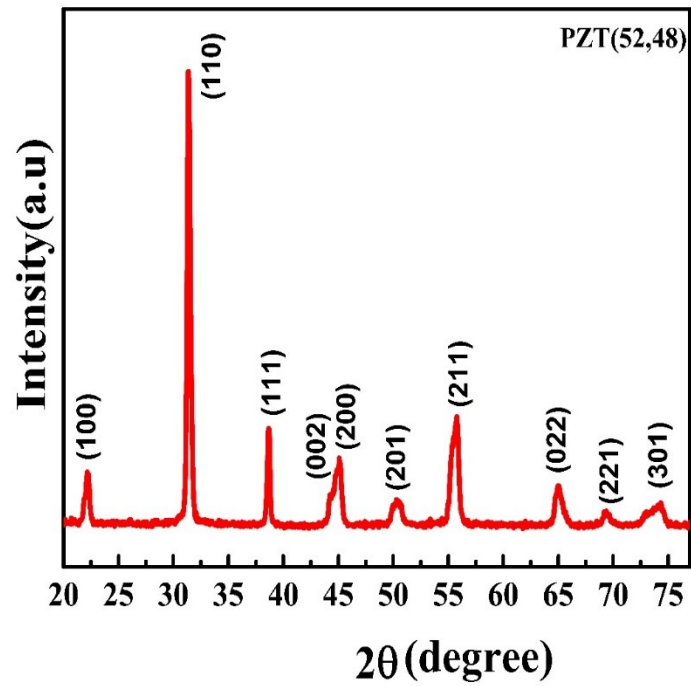
### Supporting information:



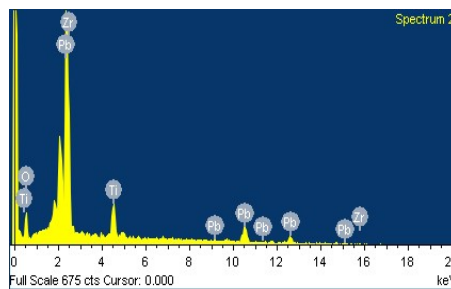
S1. Schematic diagram of microwave sintering (a)microwave furnace (b)working principle of microwave.



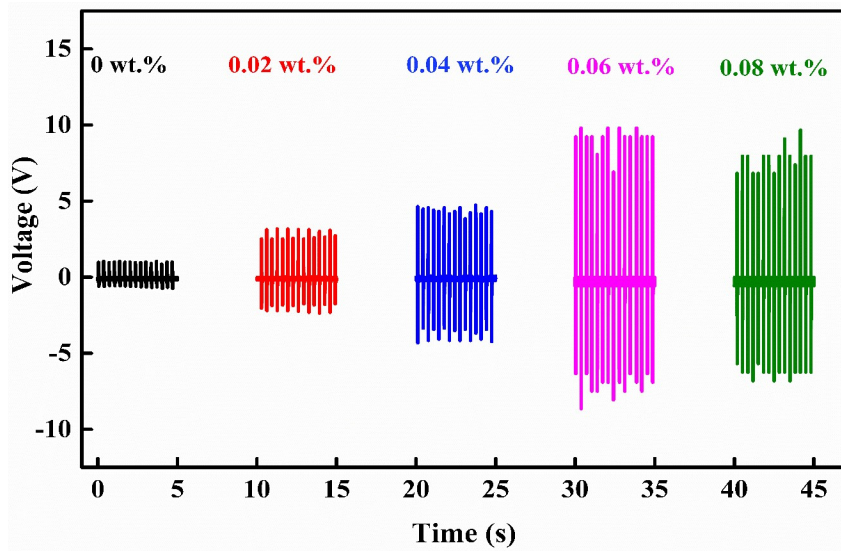
S2: Mechanical poling unit



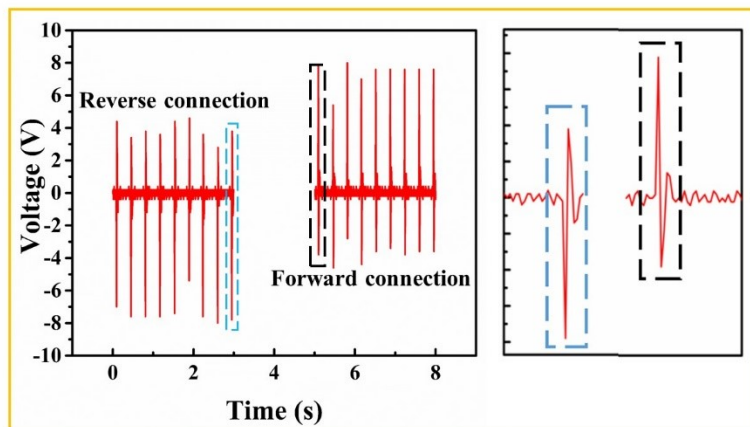
S3: XRD pattern of PZT



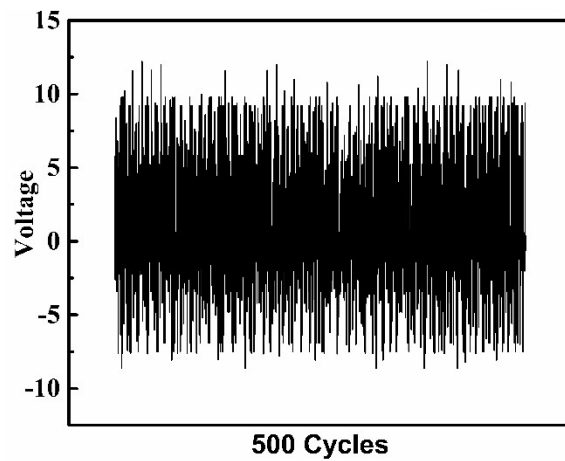
S4: EDAX spectra of PZT



S5. Output voltage ( $V_{oc}$ ) of PZT/MWCNT/PVP composite PENG device with different weights % of MWCNTs.



S6. Output voltage of reverse and forward connections of PENG.



S7. Durability test of PENG (500 cycles)

