

# Miniature Diaphragm Compressors for Electronics Cooling

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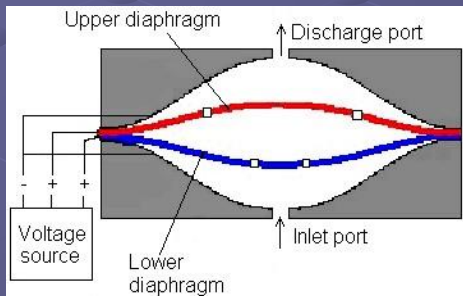
RA: Abhijit A. Sathe

## OBJECTIVE

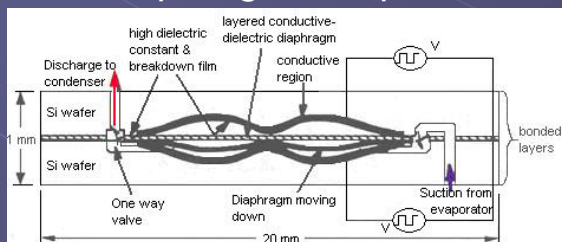
Simulate and test an electrostatically actuated diaphragm compressor as part of a miniature-scale refrigeration system for electronics cooling

## LITERATURE

Honeywell's dual-diaphragm pump



UIUC diaphragm compressor

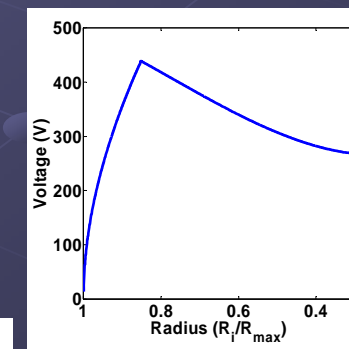
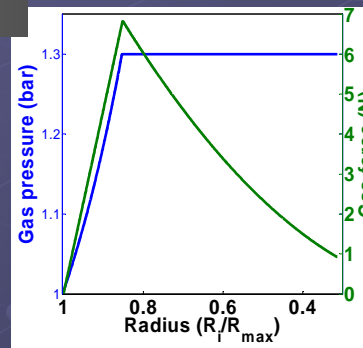
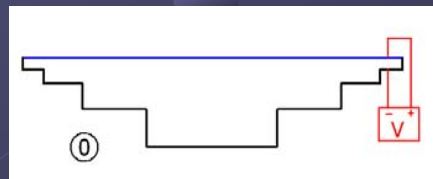
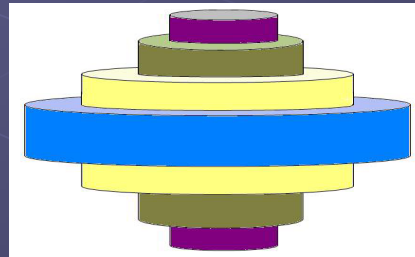
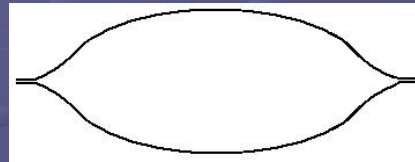


## WHAT'S NEW?

The diaphragm compressor simulation model is:

- among the few to simulate refrigerant compression, and
- the first model to simulate diaphragm zipping actuation.

## APPROACH



## FUTURE WORK

Experimental set-up

