

MEMSLand at UT-TST

Business carrier: LioniX

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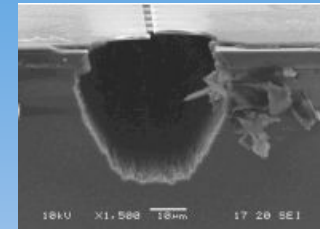
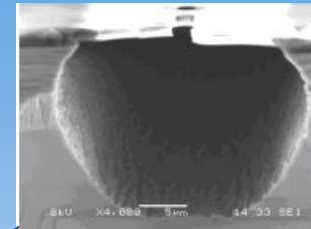
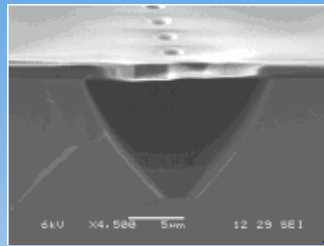
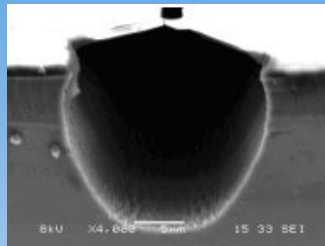
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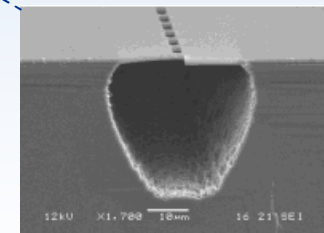
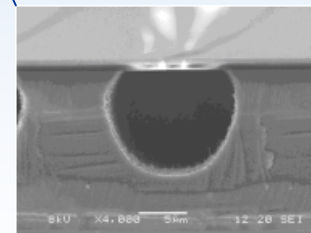
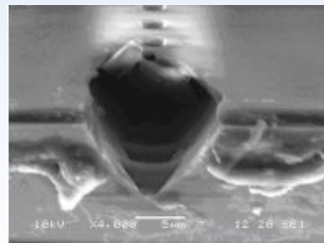
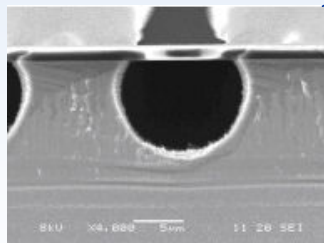
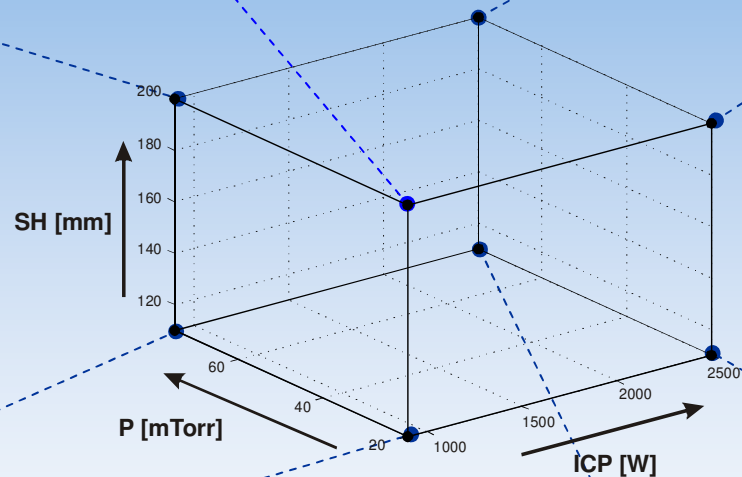
- Microfluidic Design Kit
 - Specifications
 - Design rules
 - End user (EU) application (design application)

- Process characterization & development
 - Channel etching in silicon
 - Channel etching in glass

Etching of channels in silicon



- $SF_6 = 400$ sccm
- Loading 10%
- Plate power = 0W
- **Substrate Height**
- **Pressure**
- **Plasma Power**



Current status

- Microfluidic design kit:
 - Specifications derived
 - First set of design rules: minimum/maximum channel width, minimum distance between channels, minimum distance between inlets and outlets, etc.

- Process characterization & development
 - Process characterization has started for DRIE of channels in silicon
 - Channel shape as function of various process parameters