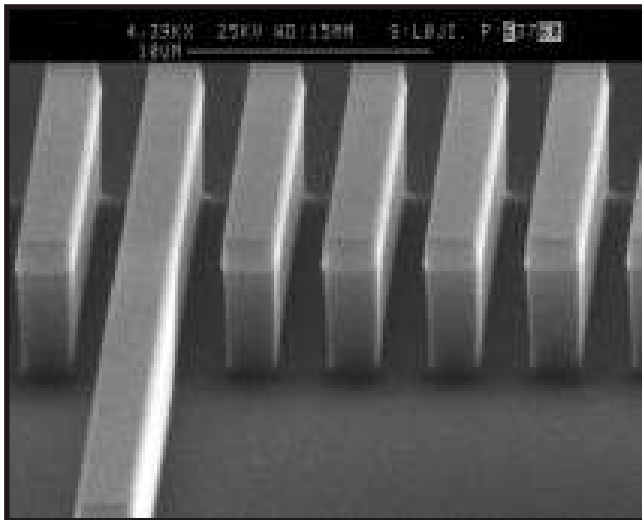
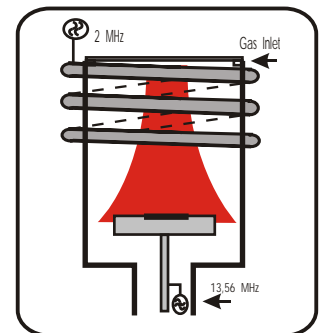
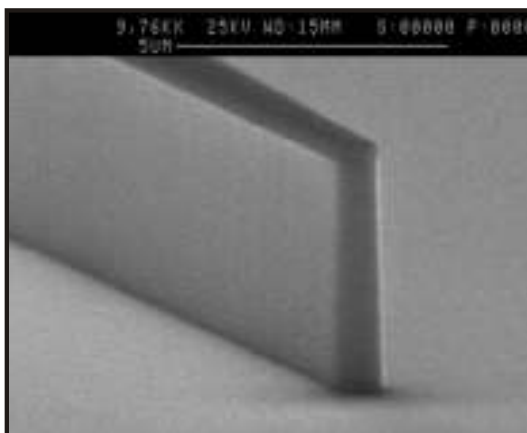


# Plasmalab Data

## Si Waveguide ICP Etching



OPT application lab, Yatton (UK):  
6  $\mu\text{m}$  deep, anisotropic etch with  
photoresist and  $\text{SiO}_2$  masks



**Equipment:**  
*Plasmalab System 100/ 133*

**Technology:**  
Reactive Ion Etching  
Inductive Coupled Plasma Source  
He backside cooling  
room temperature process  
single step process

**Results:**  
Rate : 0.5  $\mu\text{m}/\text{min}$   
Uniformity:  $\leq \pm 3\%$  (6")  
anisotropic etch  
vertical wall  
smooth surface  
selectivity to Resist > 12:1  
selectivity to  $\text{SiO}_2$  > 20:1

