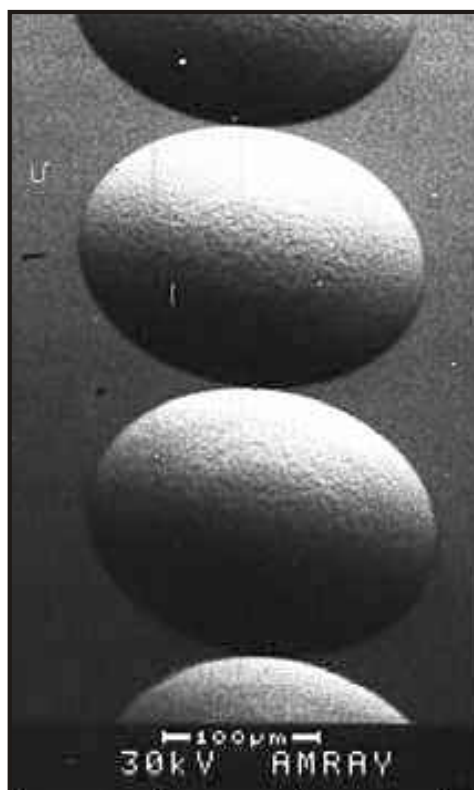
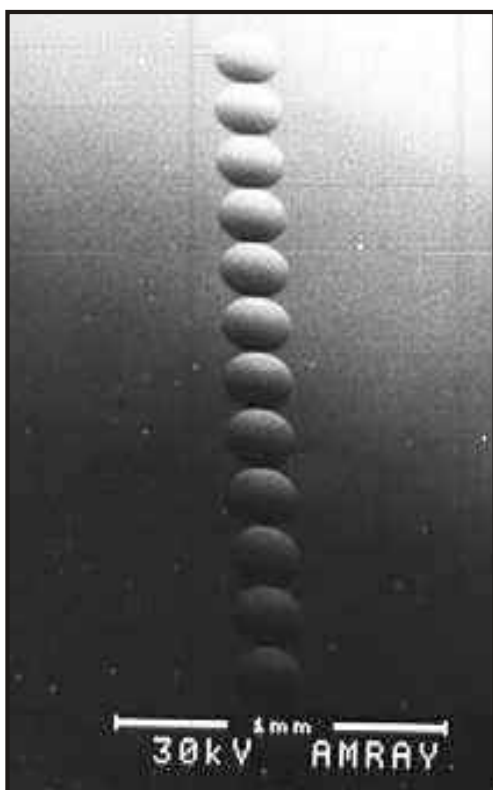


Plasmalab Data

Lenses etched in Si by RIE

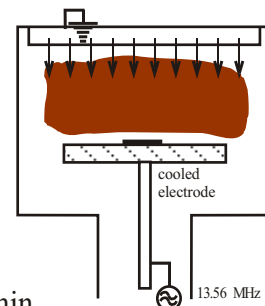


Plasmalab 80 Plus
Plasmalab 800 Plus
Plasmalab System 100
Plasmalab System 133

Courtesy of Martin Eisner,
Lehrstuhl für Optik, Uni Erlangen-Nuernberg
The SEM's show 10 μm high lenses
with 248 μm diameter (numeric aperture 0.38)



Reactive Ion Etching (RIE)



Si etch rate: 50 - 250 nm/ min
Fluor based process
anisotropic etch
smooth walls
selectivity to the resist mask : 0.8 : 1 - 3 : 1
uniformity over 4" < +/- 2 %

Application:
light coupling into single mode fibres at 1318 nm