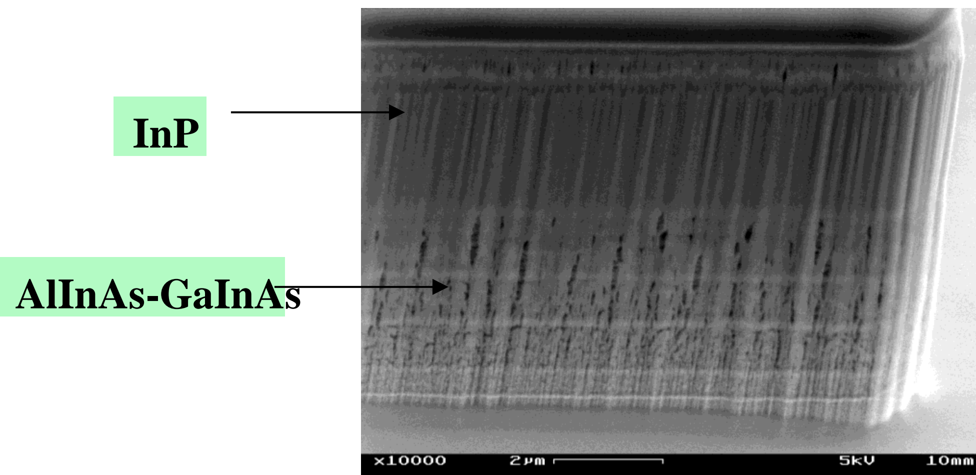
InP/(AlInAs-GaInAs multi-layers)/InP

Substrate:	InP/(AlInAs-GaInAs multi-layers)/InP
Chemistry:	HBr, N2
Mask:	SU-8
Selectivity:	> 10:1
Etch rate:	~ 2.0 um/min



HBr flow:	60 sccm
N2 flow:	9 sccm
Pressure:	5 mTorr
ICP power:	500 W
RF bias:	100 W
Temperature:	160°C

This process resulted in uniform etching along the depth for different materials. For multi-layer-different materials etching, the big challenge is the jags or roughness along the sidewall caused by selective etching or varying lateral etch rates of different materials. This process overcomes this problem and also demonstrated clean & smooth etch surface.