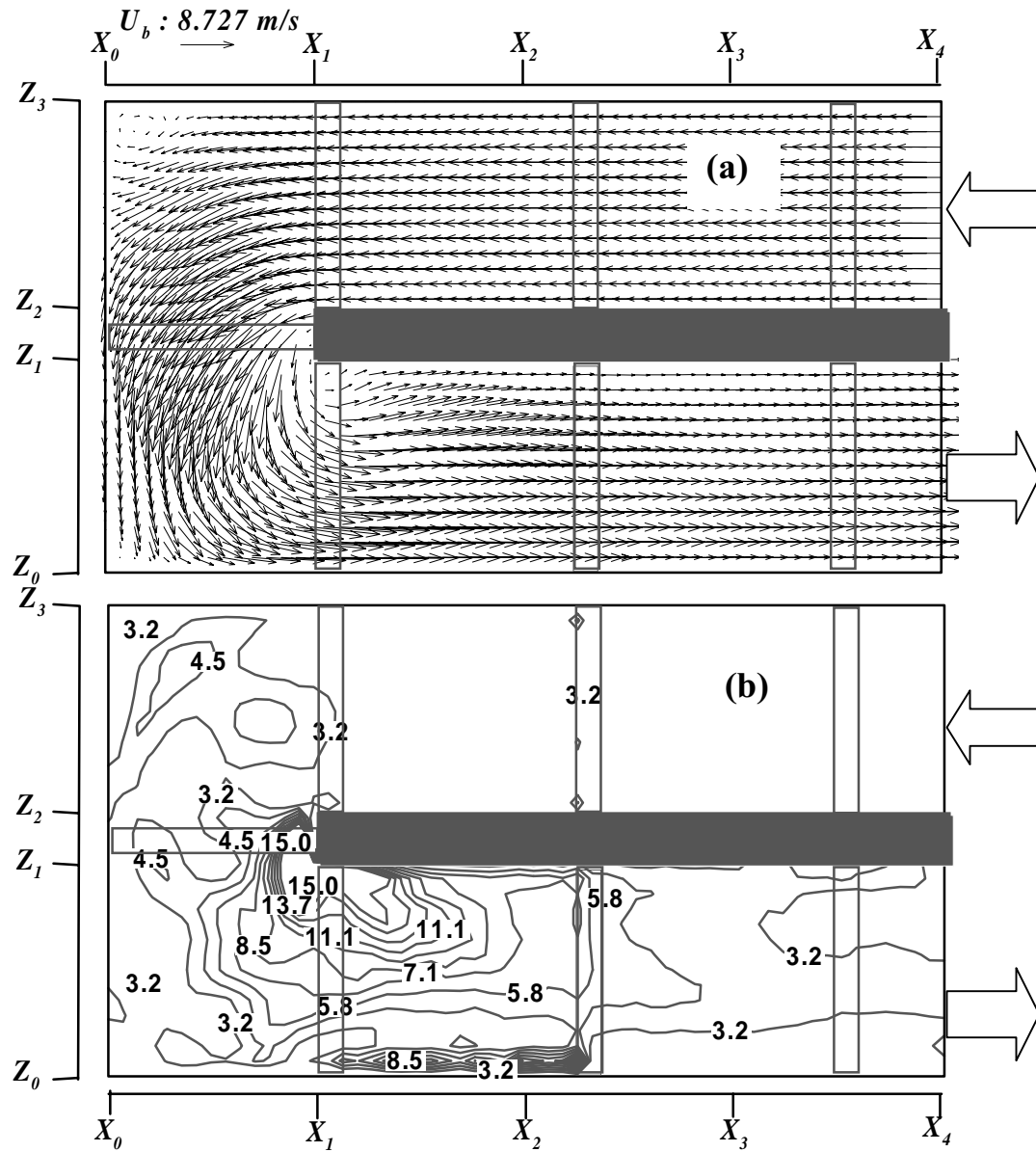


## Micro-Scale Fluidics and Heat Transport Laboratory



Main flow development at  $y = 0.5 Y_1$  with  $90^\circ$  ribbed wall at  $Re = 30,000$ ;  
 (a) flow vector plot (b) normalized turbulent kinetic energy  $\frac{(\overline{u^2} + \overline{w^2})/2}{U_b^2} \times 100$  plot